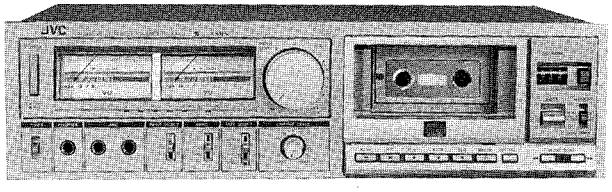
JVC

SERVICE MANUAL

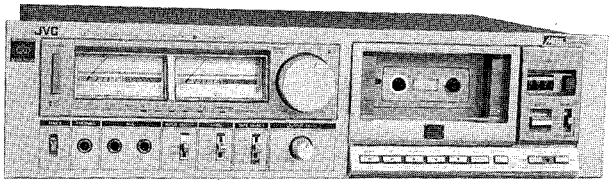
MODEL

KD-A55 A/B/C/E/J/U

STEREO CASSETTE DECK



KD-A55C/J



KD-A55A/B/E/U

No. 4188
March 1980

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Specifications

Type : Stereo cassette deck
Track system : 4-track, 2-channel
Tape speed : 1-7/8 inch/sec (4.8 cm/sec)
Frequency response:
(0 VU recording)
Metal tape *1; 30–12,500 Hz (±3 dB)
SA/Chrome tape *2; 30–8,000 Hz (±3 dB)
SF/Normal tape *3; 30–8,000 Hz (±3 dB)
(–20 VU recording)
Metal tape *1; 20–18,000 Hz
30–16,000 Hz (±3 dB)
SA/Chrome tape *2; 20–18,000 Hz
30–16,000 Hz (±3 dB)
SF/Normal tape *3; 20–17,000 Hz
30–15,000 Hz (±3 dB)
Surpasses DIN 45 500.
Note: *1 ... SCOTCH METAFINE or Equivalent
*2 ... TDK SA or Equivalent
*3 ... MAXELL UD or Equivalent
S/N ratio : 60 dB (from peak level, weighted, Metal tape)
The S/N is improved by 5 dB at 1 kHz and by 10 dB above 5 kHz with ANRS on.
(DIN 45 500 weighted)
Effect of Super ANRS: (normal tape)
Improvement of S/N: the same as with ANRS
Improvement of frequency response:
0 VU recording; 6 dB at 10 kHz
+5 VU recording; 12 dB at 10 kHz
Improvement of distortion:
0 VU recording; 3% or less at 10 kHz
+5 VU recording; 3% or less at 10 kHz
Wow and flutter : 0.04% (WRMS),
0.14% (DIN 45 500)
Crosstalk : 65 dB (1 kHz)
Harmonic distortion: K3; 0.4%, THD; 1.0%
(metal tape, 1 kHz 0 VU)
Bias : AC bias
Erasure : AC erasure (85 kHz)
Heads : SEN ALLOY head for recording/playback, 2-gap SEN ALLOY head for erasure, Ferrite head for music scan
Motors : Electronic governed DC motor (for Capstan)
DC motor (for Reel)

Fast forward time : 85 sec. with C-60 cassette
Rewind time : 85 sec. with C-60 cassette
Semiconductors : 11 ICs, 59 transistors, 61 diodes
Input terminals
Mic jack x 2 : Max. sensitivity; 0.2 mV (–72 dBs)
Matching impedance; 600 Ω – 10 kΩ
Input jack x 2 : Min. input level; 80 mV (–20 dBs)
Input impedance; 100 kΩ
Output terminals
Output jack x 2 : Output level; 0 – 500 mV
Output impedance; 6 kΩ
Phones jack x 1 : Output level; 0.3 mW (8 Ω)
Matching impedance; 8 Ω – 1 kΩ
DIN socket : Min. input level; 0.1 mV/kΩ
Input impedance; 10 kΩ
Output level; 0 – 500 mV
Output impedance; 5.5 kΩ
Matching impedance; 50 kΩ or more
Power requirement: AC 120 V, 60 Hz (KD-A55C/J)
AC 240/220/120 V, 50/60 Hz (KD-A55A/B/E)
AC 240/220/120/100 V, 50/60 Hz (KD-A55U)
Power consumption: 25 W
Dimensions : 17-3/4" (450 mm) W (KD-A55A/B/E)
16-1/2" (420 mm) W (KD-A55C/J)
4-3/4" (120 mm) H
11-7/8" (300 mm) D
Weight : 15.4 lbs (7.0 kg)

Design and specifications are subject to change without notice.

No. 4188

JVC SERVICE MANUAL

Supplementary

MODEL KD-A55A/B/C/E/J/U

STEREO CASSETTE DECK

This manual is supplementary of KD-A55A/B/C/E/J/U Service Manual (No. 4188) to improve performance and other reasons.

Please add this comparative table to the service manual (No. 4188) and give an order to us for the parts concerned to keep them as spare.

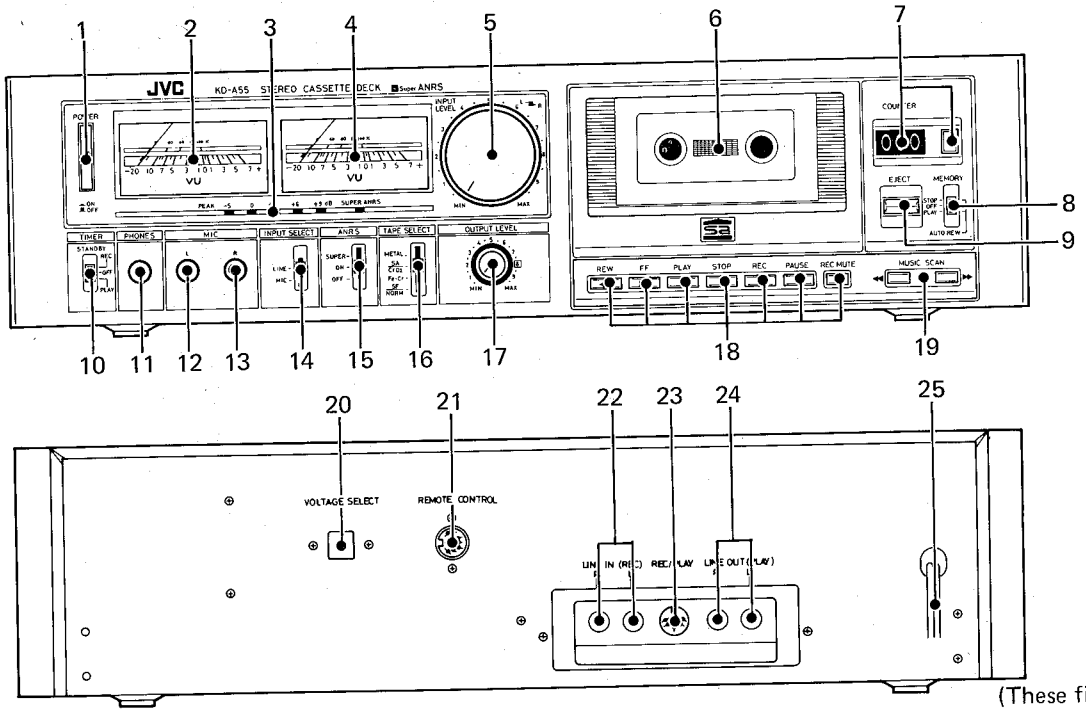
Page	Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
			Jump Wire		2
33	R130, 230	~~QRD143J-121S~~	~~C. Resistor~~	~~120 Ω ¼ W~~	~~2~~
	~~R135~~	~~QRD147J-102S~~	~~"~~	~~1 kΩ "~~	~~1~~
					2
	~~R235,~~ 165, 265	QRD143J-102S	"	1 kΩ "	~~3~~
					4
34	C102, 202, 103, 203, ~~130, 230~~	QEB41EM-106M	E. Capacitor (Low Leak)	10 μF 25 V	~~6~~
					4
	C108, 208 130, 230	QEB41EM-475M	E. Capacitor (Low Leak)	4.7 μF 25 V	~~2~~
		-334M		0.33	
	C129, 229	QEB41HM-~~335M~~	E. Capacitor (Low Leak)	~~3.3~~ μF 50 V	2
		-332		0.033	
	C132, 232	QFM41HJ-~~562~~	M. Capacitor	~~0.0056~~ μF 50 V	2
		AN7362N			
35	IC101, 102	~~AN7362~~	IC		2
39	(Power Switch)	-002			
		VMW4570-~~001~~	P.W. Board	KD-A55A/B/C/E/J	1
		-002			
		VMW4567-~~001~~	P.W. Board	KD-A55U	1
		⚠ QSP2111-011	Push Switch	for Power Switch KD-A55A/E	1
		⚠ " -011BS	"	" KD-A55B	1
		⚠ QSP1110-222	"	" KD-A55C/J	1
		⚠ " -221	"	" KD-A55U	1
		*QCZ9015-103	C. Capacitor	KD-A55U	1
		VPH2130-001			
40	2	~~VPH2126-001~~	Cushion (L)		1
		VPH2131-001			
	2	~~VPH2127-001~~	Cushion (R)		1
		VPK4134-001	Door		
		~~VPK4132-001~~	~~Spacer~~		1

No. 4188-B
April 1980

Features

- Single lever 4-stage tape select switch makes the KD-A55 compatible with all types of tape including the new metal Tape format.
- Full logic control with 2-motor independant drive mechanism.
- SA (SEN-ALLOY) record/play head with wear resistance comparable with ferrite and sound quality better than Permalloy.
- Highly efficient SA (SEN-ALLOY) erase head capable of erasing high-coercivity Metal Tape.
- Self-illuminating control buttons clearly indicate the operational mode.
- ANRS and Super ANRS greatly reduce tape hiss-noise and improve linearity at high frequencies.
- 5 LED multi-point peak level indicator facilitates the adjustment of the recording level.
- Continuous stand-by mechanism with REC-OFF-PLAY switch for greater facility in unattended recording.
- REC MUTE button, convenient for leaving a non-recorded section on the tape between programs.
- MUSIC SCAN button for skipping and playing programs by locating the non-recorded sections between programs with the sensor head provided for automatic program selection.
- MEMORY switch, convenient when you want to listen to the same section of tape repeatedly.
- Remote Control terminal for operating the deck from a distance using the optional R-50E Remote Control Unit.

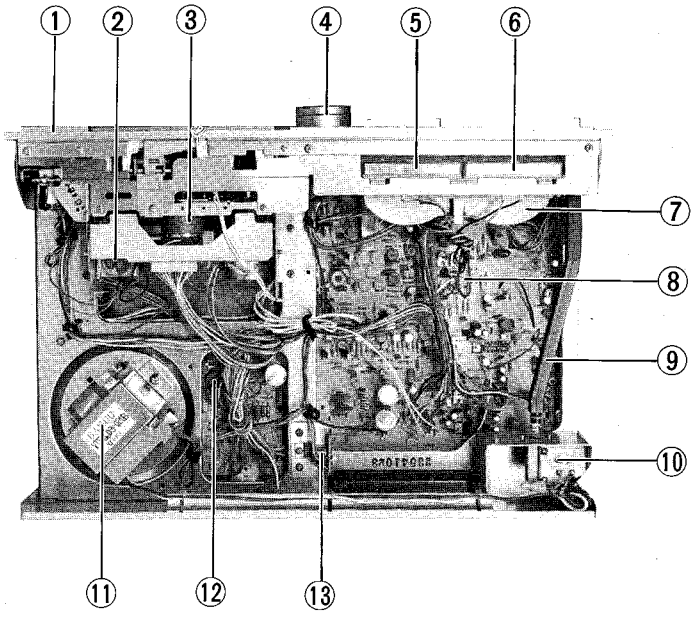
Controls and Connections



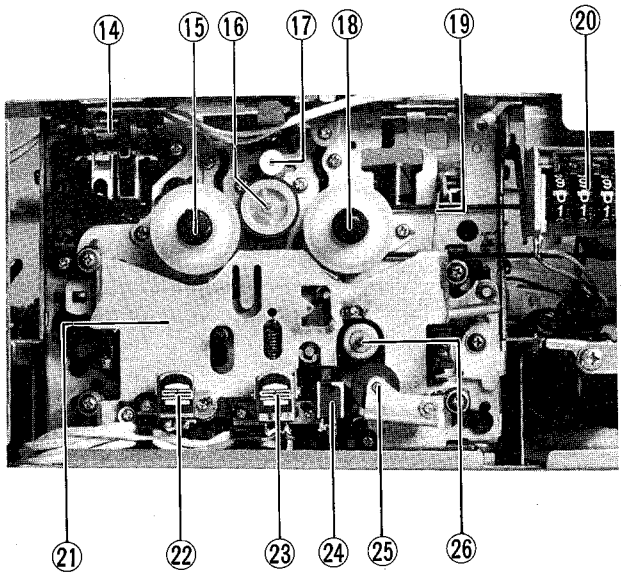
(These figures show KD-A55A/B/E/U.)

1. POWER switch
2. Left channel VU meter
3. Multi peak level indicators (red)
4. Right channel VU meter
5. INPUT LEVEL controls
   (forward knob—Left channel
   rearward knob—Right channel)
6. Cassette holder
7. Tape counter/counter reset button
8. MEMORY/AUTO REW switch
9. EJECT button
10. TIMER STANDBY switch
11. PHONES jack
12. Left channel microphone jack (MIC-L)
13. Right channel microphone jack (MIC-R)
14. INPUT SELECT switch
15. ANRS switch
16. TAPE SELECT switch
17. OUTPUT LEVEL control
18. Cassette operation button
    REWIND button (◀◀)
    FF (fast-forward) button (▶▶)
    PLAY button (▶)
    STOP button (■)
    REC button (O)
    PAUSE button (II)
    REC MUTE button
19. MUSIC SCAN buttons
20. Voltage select switch (KD-A55A/B/E/U)
21. Remote control socket
22. LINE IN (REC) terminals
23. REC/PLAY socket (DIN socket)
24. LINE OUT (PLAY) terminals
25. Power cord

Main Parts Location



1. Front panel assembly
2. DC solenoid for playback
3. Reel motor
4. Variable resistor (INPUT LEVEL control)
5. Right channel level meter
6. Left channel level meter
7. Meter cover
8. Main Amp. P.W. board assembly
9. Remote bar for power switch
10. Power switch P.W. board
11. Power transformer
12. Mecha control P.W. board assembly
13. IC903 (Power supply integrant circuit with heat sink bracket)



Mechanical parts

14. Switch holder (left switch)
15. Supply reel assembly
16. Idler assembly unit
17. Pully of reel motor
18. Take-up reel assembly
19. Connecting wire (for play solenoid)
20. Counter assembly
21. Slide base assembly
22. Erase head
23. REC/PB head
24. Sensing head
25. Pinch roller assembly
26. Capstan

Removal of the main parts

Observe care in handing the parts since the parts are small in size and the distance between them are short due to a deck design aimed mainly at compactness and high performance.

ENCLOSURE ASSEMBLY PARTS

- Cassette door . . . . . Depress the EJECT button to open the cassette door
  Slide off the cassette door upwards (about 5 mm) to unlock its pawls of both sides.
  Remove the cassette door forward.

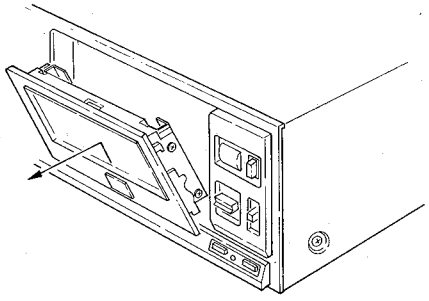


Fig. 1

- Top cover . . . . . Remove 4 screws fastening the top cover.
  Control knobs (INPUT LEVEL, OUT LEVEL) and Lever knobs (INPUT SELECT, ANRS and TAPE SELECT) . . . . . Pull off them forward.

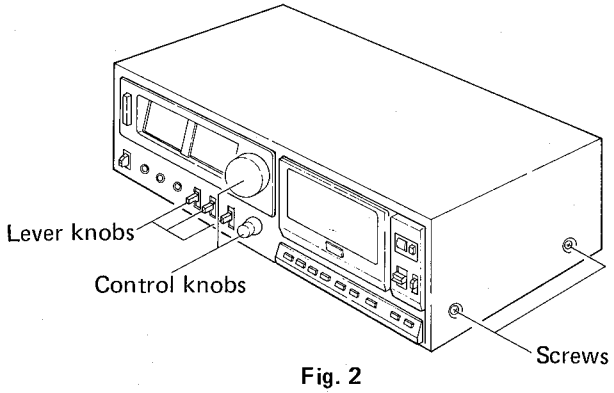
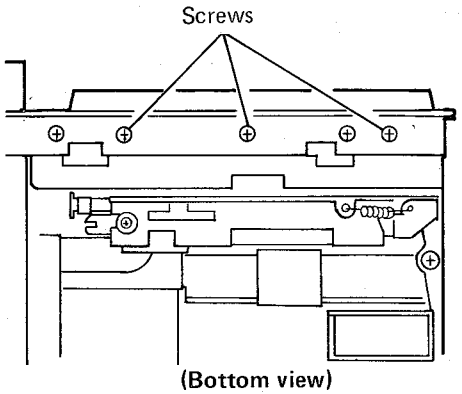


Fig. 2

- Bottom cover . . . . . Remove 5 screws fastening the bottom cover.

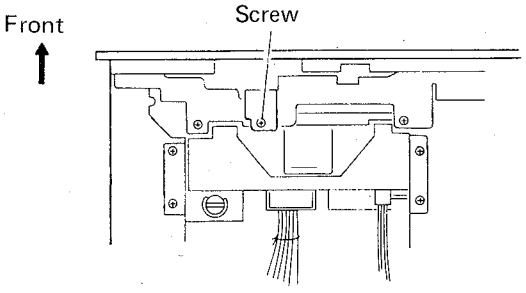
- Mecha. control switches assembly . . . . .
  (When adjusting or replacing REC/PB heads or Erase head)
  1) Remove the wires of the mecha. control switches from the wire clamp and 2 wire sockets after having removed the top cover.
  2) Remove 3 screws positioned below the mecha. control switches (on the bottom of the deck) and pull the control section forwards — no need of removing the front panel assembly.



(Bottom view)

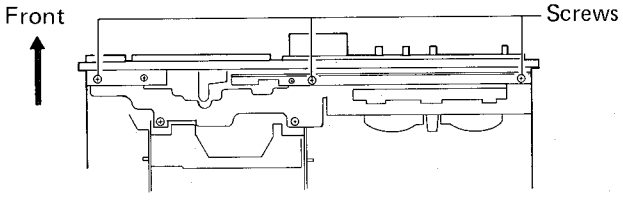
Fig. 3

- Front plate assembly . . . . .
  1) Remove a screw fastening the bracket to mechanical assembly.
  2) Remove 5 screws (3 screws on upper side and 2 screws on bottom side.) fastening the front plate assembly.
  (Front plate is removed with cassette holder and air dumper related parts.)



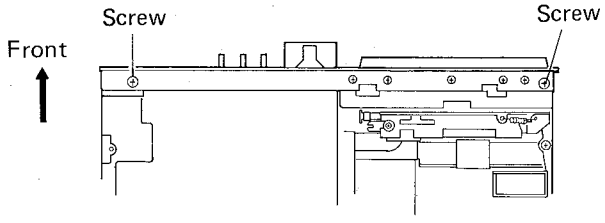
(Top view)

Fig. 4



(Top view)

Fig. 5



(Bottom view)

Fig. 6

- Meter escutcheon . . . . .
  1) Remove 2 screws fastening the escutcheon. (under side)
  2) Remove 3 pawls holding the escutcheon (upper side)

  (Meter escutcheon is removed with power knob ass'y and LED indicator P.W. board parts.)

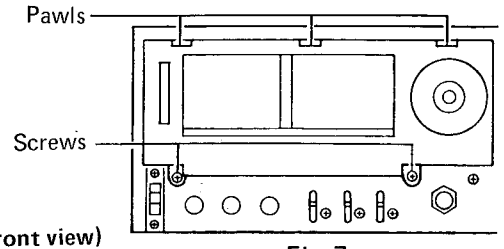


Fig. 7

- Removal of the level meter

  To remove 3 pawls of the meter cover, open the frame of front bracket to upper side, and then, remove the level meter with meter cover to rear side.

  (To remove the level meter, the meter escutcheon need not remove.)

ELECTRICAL PARTS

- Mechanical control P.W. board assembly . . . . .

  Remove 4 screws fastening mecha. control P.W. board. (on bottom side)

- Main amp P.W. board assembly . . . . .
  1) Related parts of front bracket
     a) Remove washer and nut fastening variable resistor for output level control.
     b) Remove 3 screws fastening the lever switches. (INPUT SELECT, ANRS and TAPE SELECT)
  2) Remove 4 screws fastening the main amp P.W. board. (on bottom side)
  3) Remove 2 screws fastening the escutcheon of pin jack ass'y to rear panel.
  4) Pull off the P.W. board to rear and under sides.

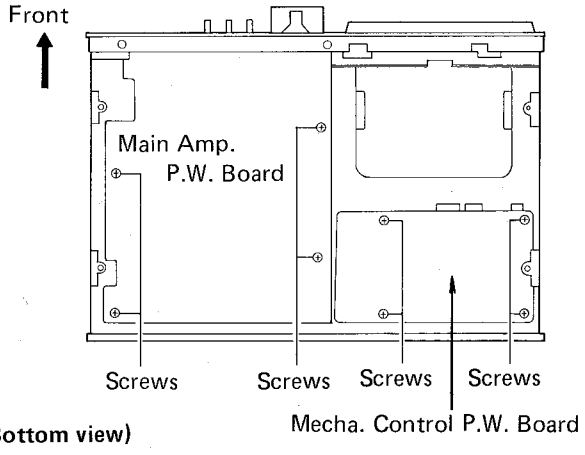


Fig. 8

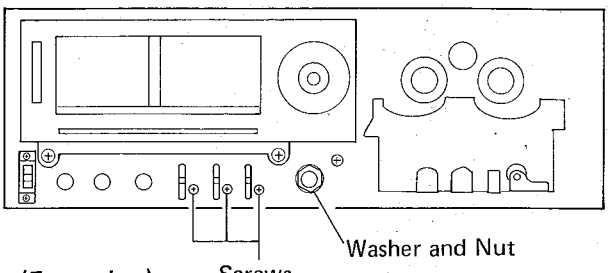


Fig. 9

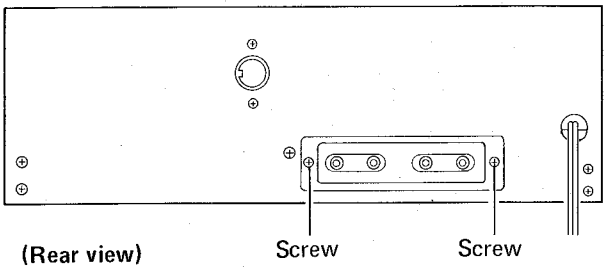


Fig. 10

MECHANICAL ASSEMBLY

1. Remove a screw fastening the bracket of mechanical ass'y. (See Fig. 4 of page 5.)
2. Remove 2 screws fastening the front bracket. (upper side)
3. Remove a screw fastening the front bracket. (right side)
4. Remove 4 screws fastening the amp chassis. (2 screws each)

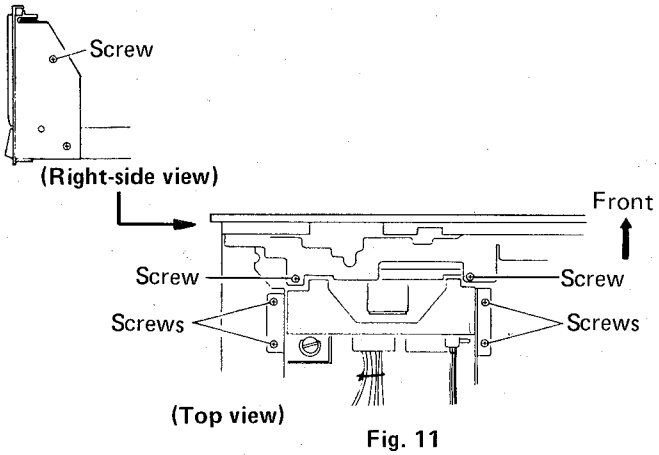


Fig. 11

Note: When assembly the mechanical ass'y . . . . . Insert the mechanical ass'y to front bracket from rear side, pushing the shift arm from upper side (holding the shift lever tip to upper side) and sliding the mechanical ass'y on the amp chassis, and then, fasten each screws in the same method as at removing, after to check the shift lever tip position to front of the eject bracket.

When fastening the shift arm, push the eject button to check the switch (left side of shift arm) operation.

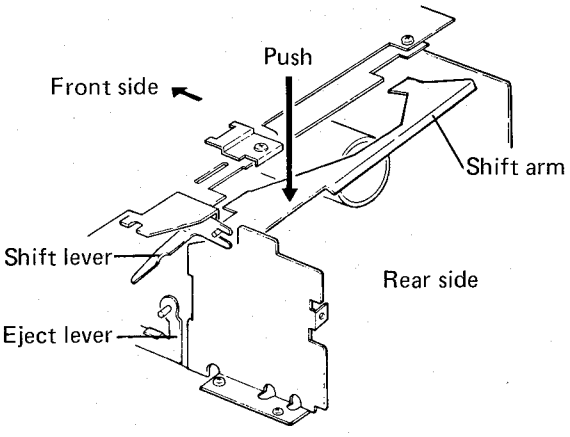


Fig. 12

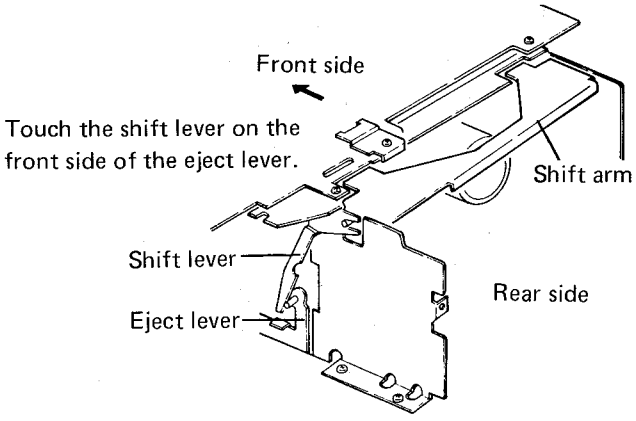


Fig. 13

MECHANICAL PARTS

1. Music scan head . . . . .
   1) Remove a screw fastening the head base for music scan head.
   2) Slide to rear side.
   3) Remove 2 screws fastening the head to the slide plate.
2. REC/PB head . . . . .
   Remove a screw ①.
   Work loose a screw ② for adjustment.
3. Erase head . . . . .
   Remove a screw ③.
   Work loose a screw ④ for adjustment.
4. Pinch roller arm ass'y . . . . .
   Remove an E-ring ⑤ holding its assembly.
   Pull it off from the shaft.
5. Supply reel disc . . . . .
   Pull out the reel disc stopper ⑥ and pull out its disc from shaft.
6. Take-up reel disc . . . . .
   Pull out the reel disc stopper ⑦ and remove the counter belt, pull out its disc from shaft.

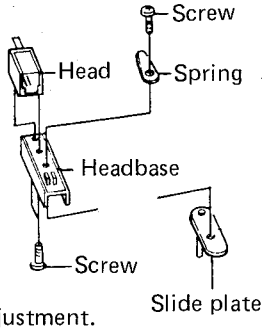


Fig. 14

Note: (1) Remove the reel disc stoppers with a piece of sheet metal inserted between the reel disc and stopper, when assembling the reel disc, the stopper need a new parts (the stopper cannot use again).
(2) Be careful not to stain the counter belt.

7. Reel motor . . . . .
   Remove 3 screws ⑧ fastening the reel motor.
8. Capstan motor . . . . .
   1) Remove a screw ⑨ fastening the rubber stopper.
   2) Remove the capstan belt from the motor pulley.
   3) To remove the motor, turn it in counterclockwise direction and pull it out backward (with 3 cushions and 3 screws for fastening the motor).

Note: When replacing the motor, check the following points.
(1) Is the motor placed in correct position? (Don't make the motor's position deflective.)
(2) Does the capstan belt run in the center of the motor pulley?

(Front view)

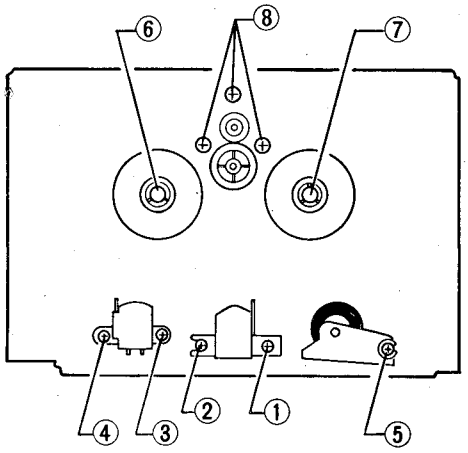


Fig. 15

(Rear view)

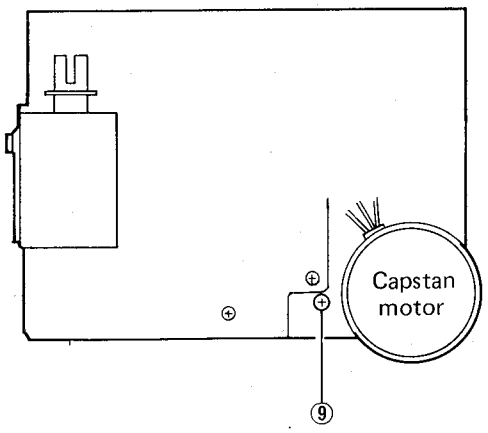
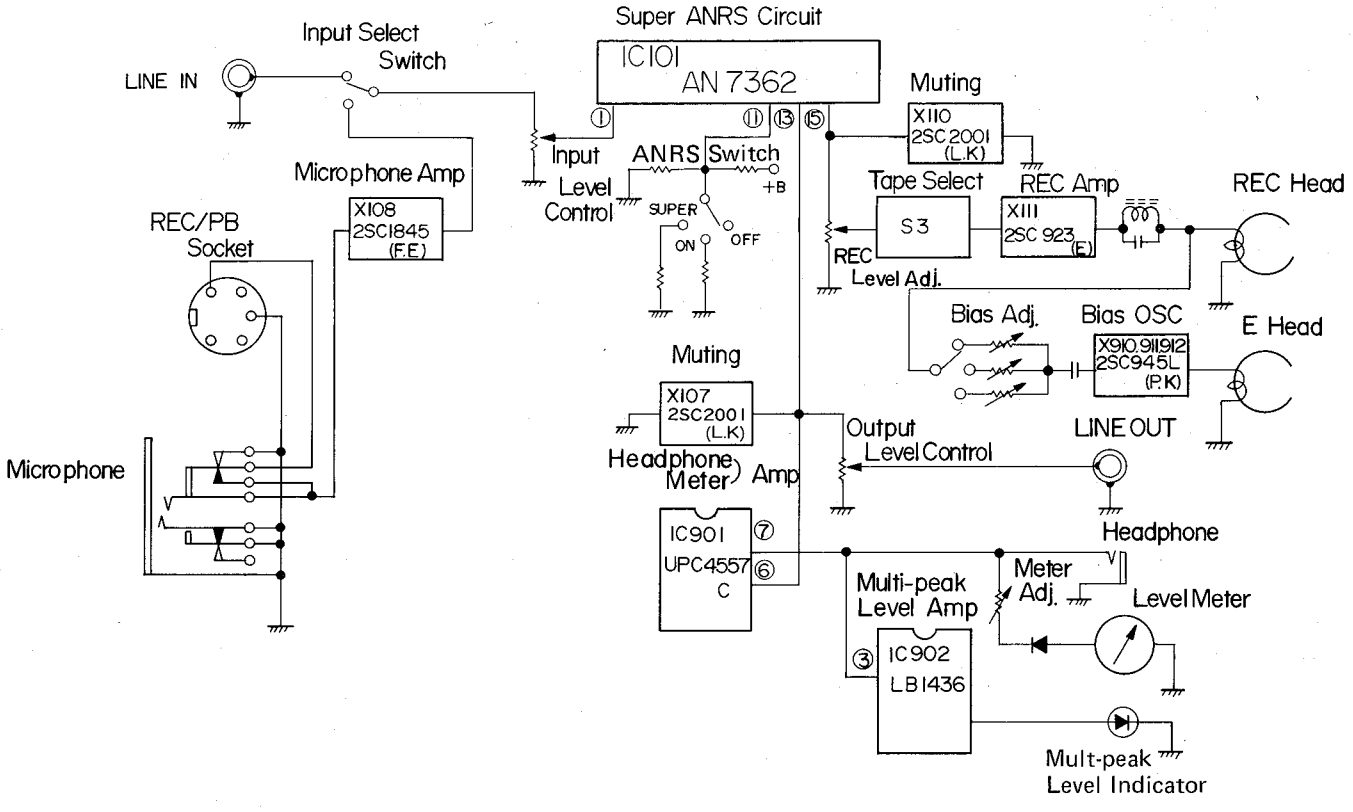


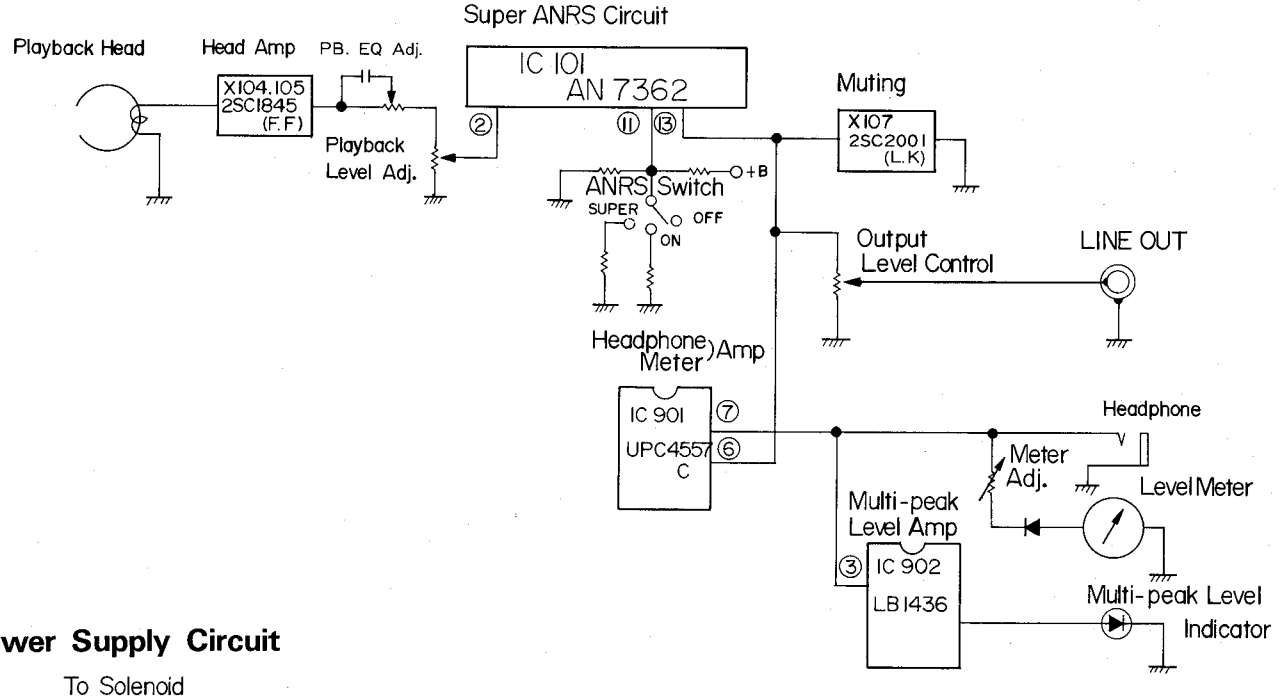
Fig. 16

Block Diagram

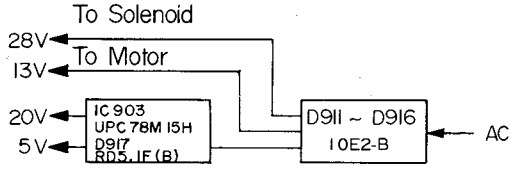
Recording System



Playback System

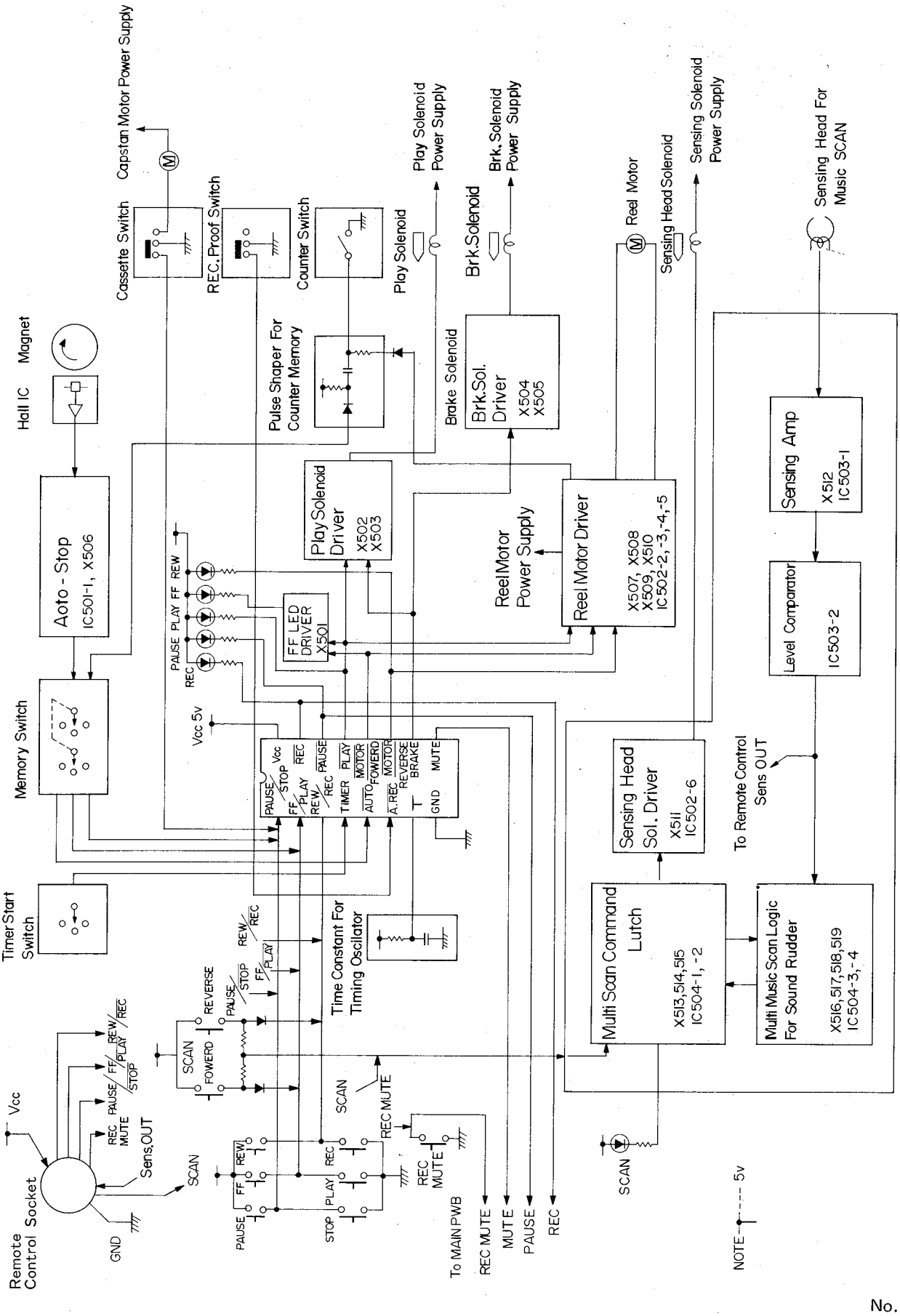


Power Supply Circuit



No. 4188

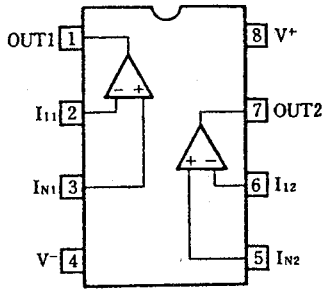
Mecha. Control Circuit



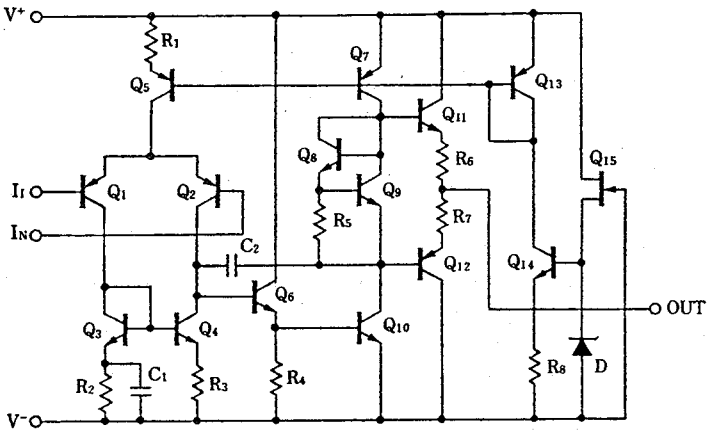
Integrant Circuit

– UPC4557C –

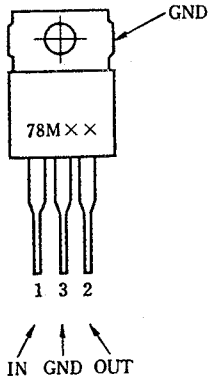
Top view



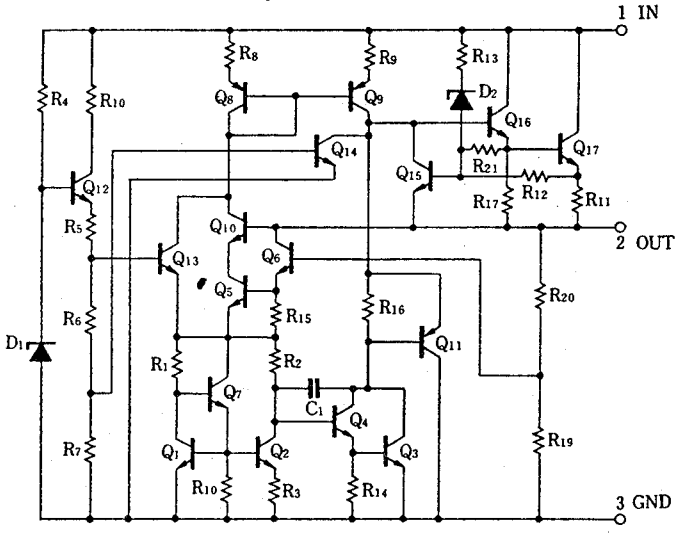
Equivalent circuit (1/2)



– UPC78M15H –

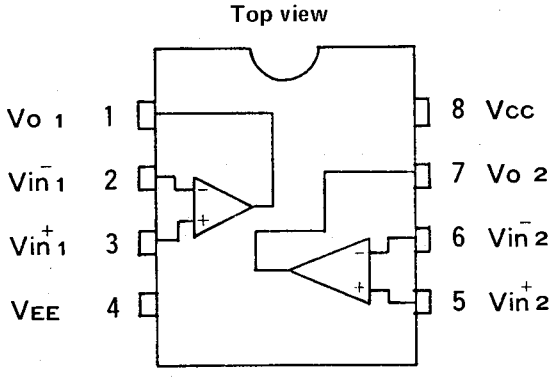


Equivalent circuit

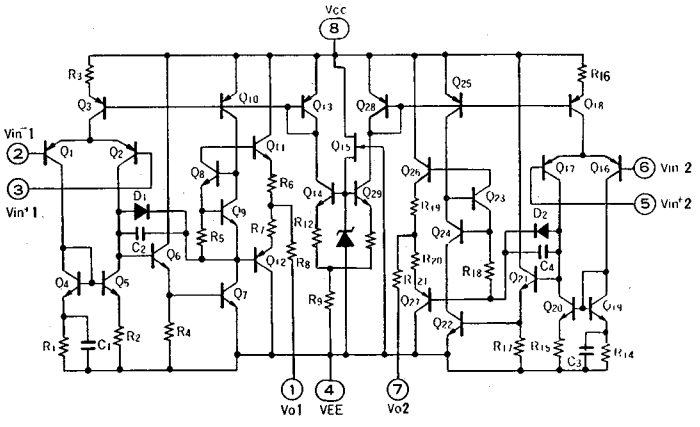


– AN6552 –

Top view

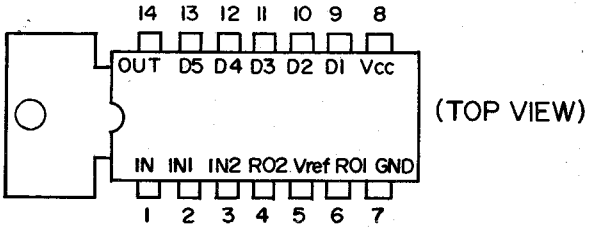


Equivalent circuit

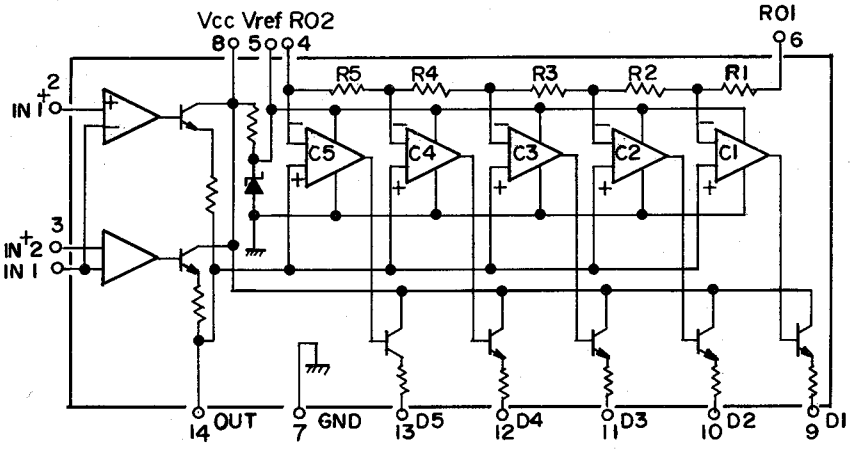


(Continued to page 15)

— LB1436 —

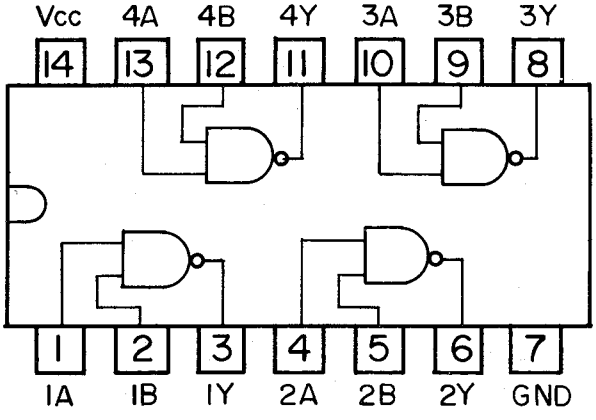


(TOP VIEW)



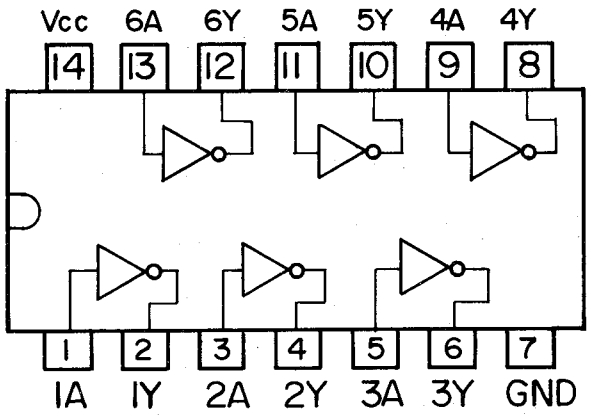
— M74LS03P —

(Top view)

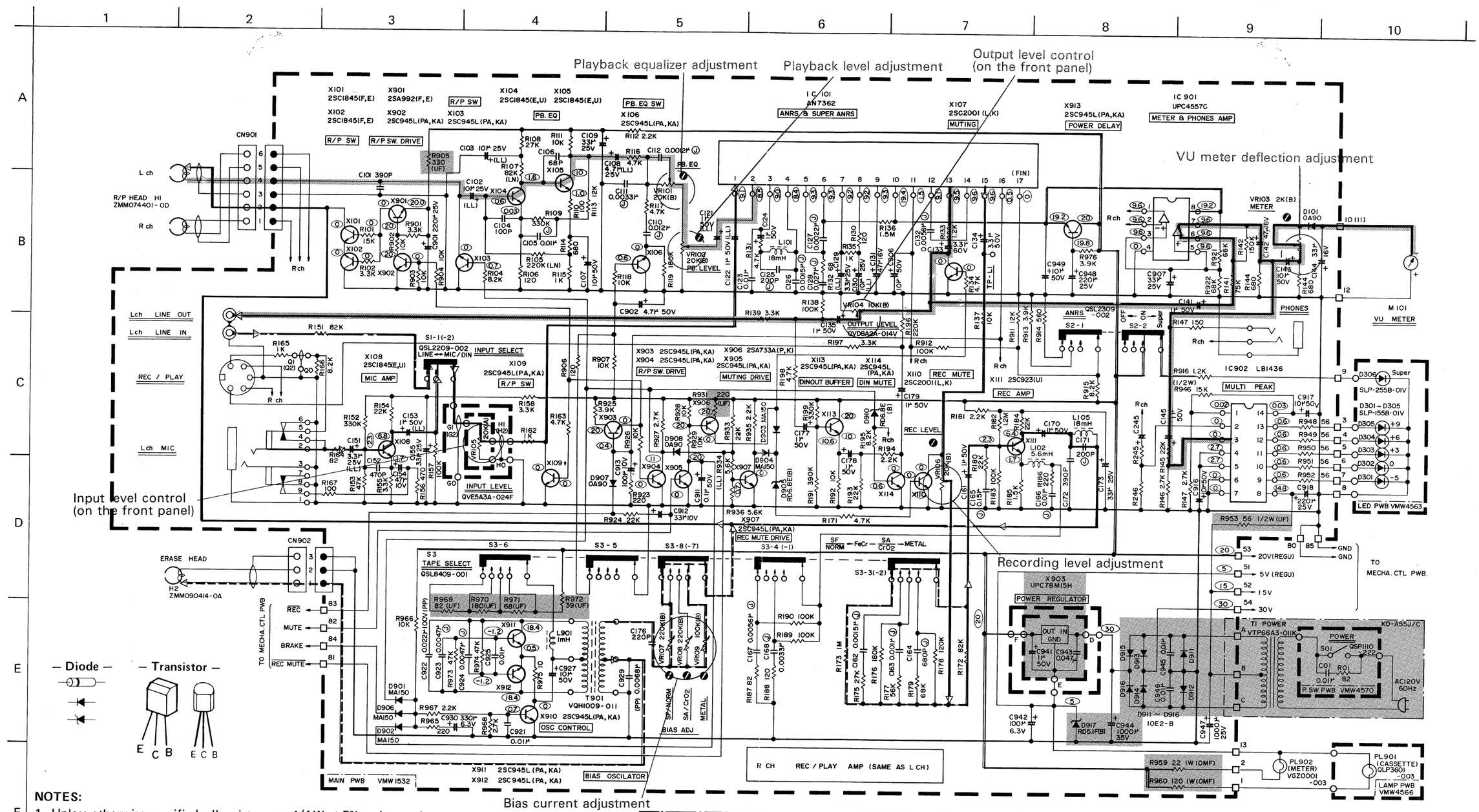


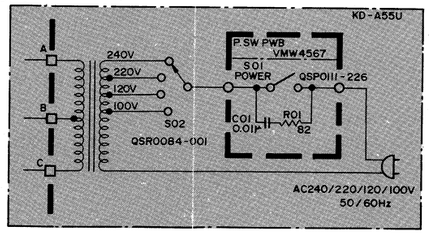
— M53206P —

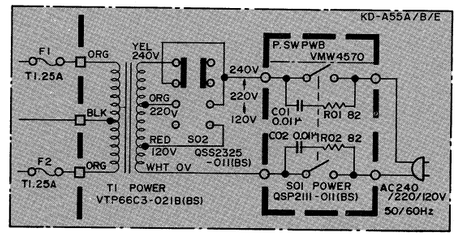
(Top view)



Standard Schematic Diagram of KD-A55 (Amprifier Circuit)



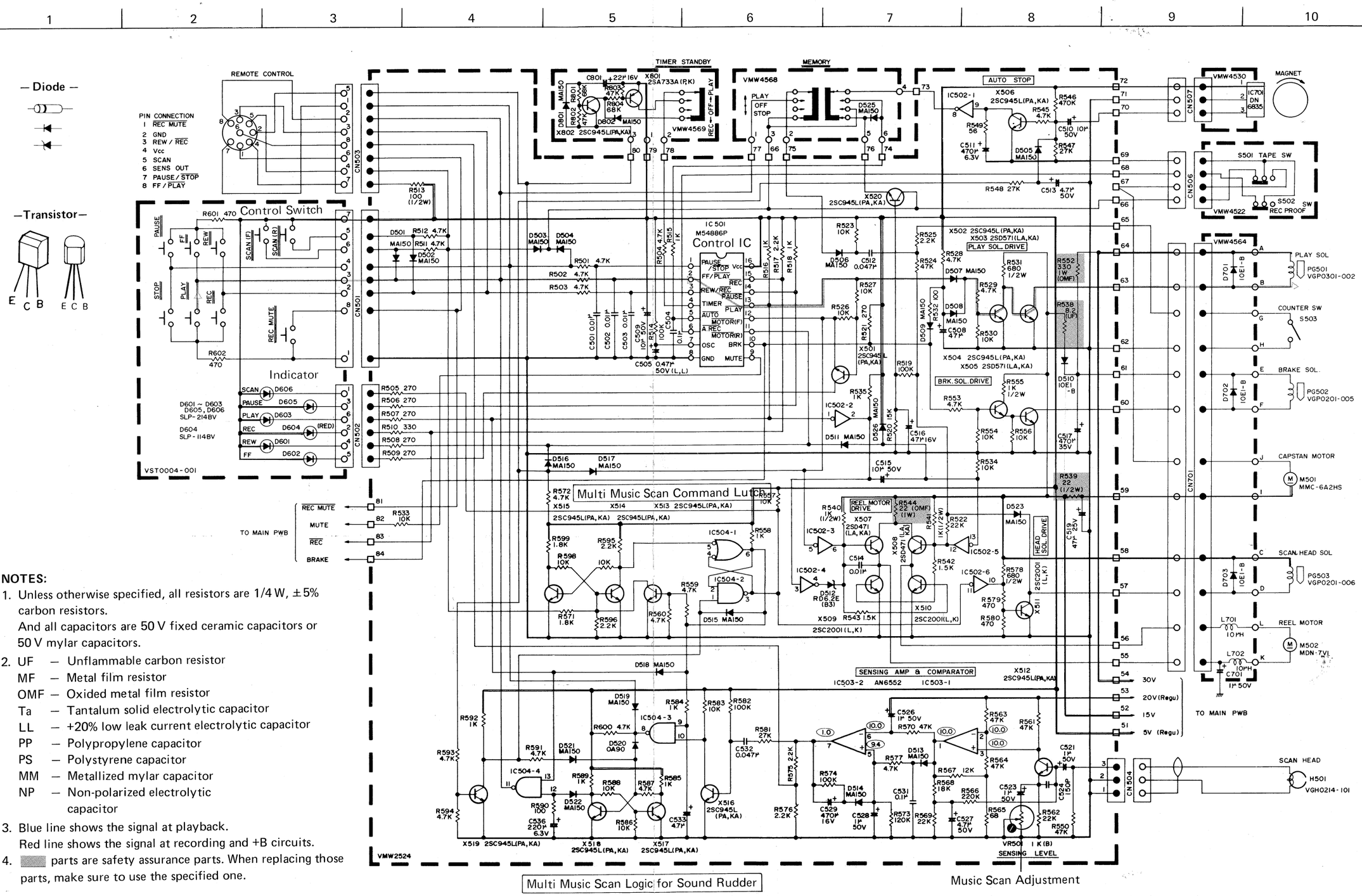




NOTES:

1. Unless otherwise specified, all resistors are 1/4 W, ±5% carbon resistors.
   And all capacitors are 50 V fixed ceramic capacitors or 50 V mylar capacitors.
2. UF — Unflammable carbon resistor
   MF — Metal film resistor
   OMF — Oxided metal film resistor
   Ta — Tantalum solid electrolytic capacitor
   LL — +20% low leak current electrolytic capacitor
   PP — Polypropylene capacitor
   PS — Polystyrene capacitor
   MM — Metallized mylar capacitor
   NP — Non-polarized electrolytic capacitor
3. Red lines show +B circuits.
   Blue line shows the signal at playback.
4. ▒ parts are safety assurance parts. When replacing those parts, make sure to use the specified one.

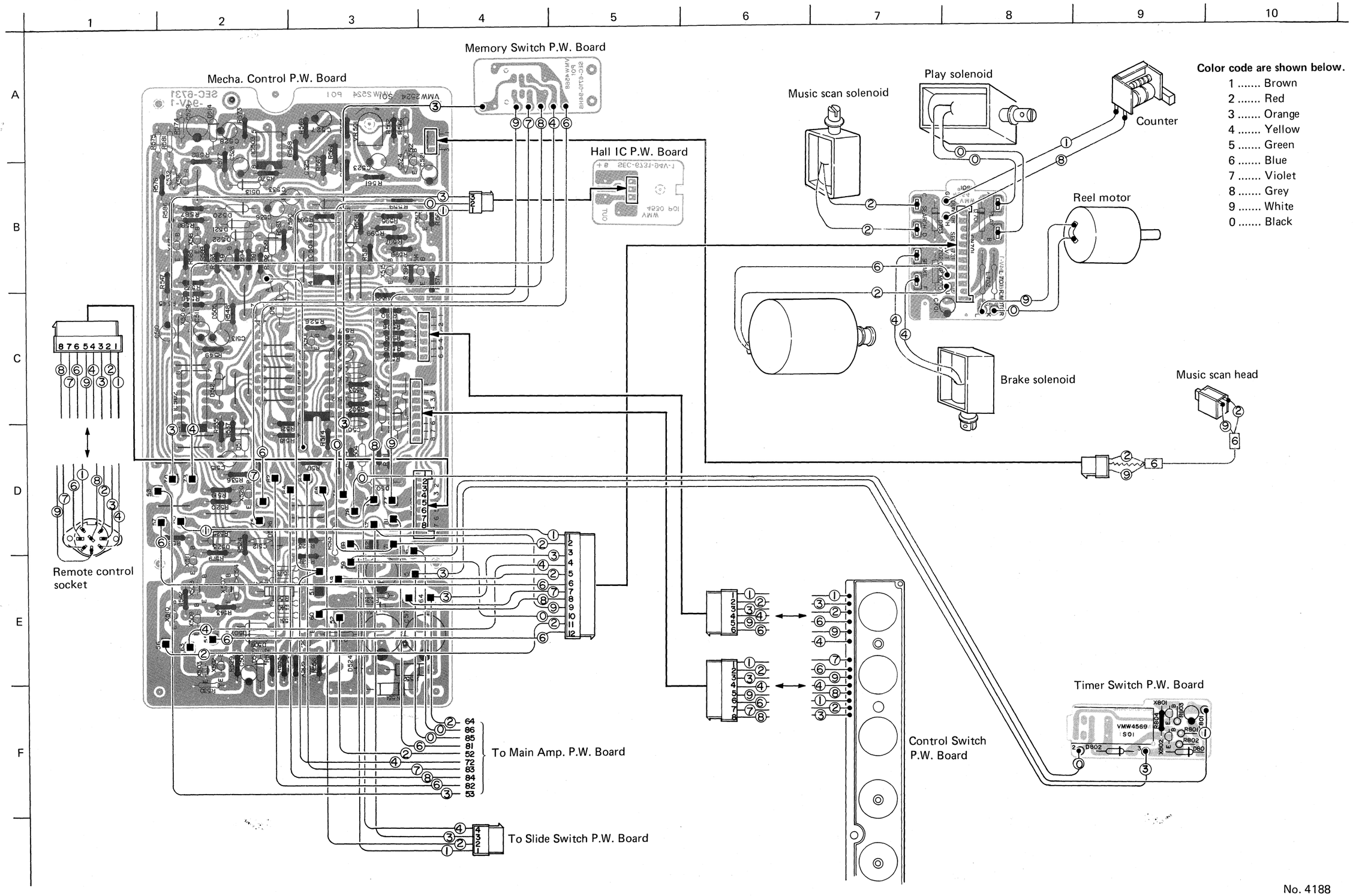
Standard Schematic Diagram of KD-A55 (Mecha Control Circuit)



NOTES:

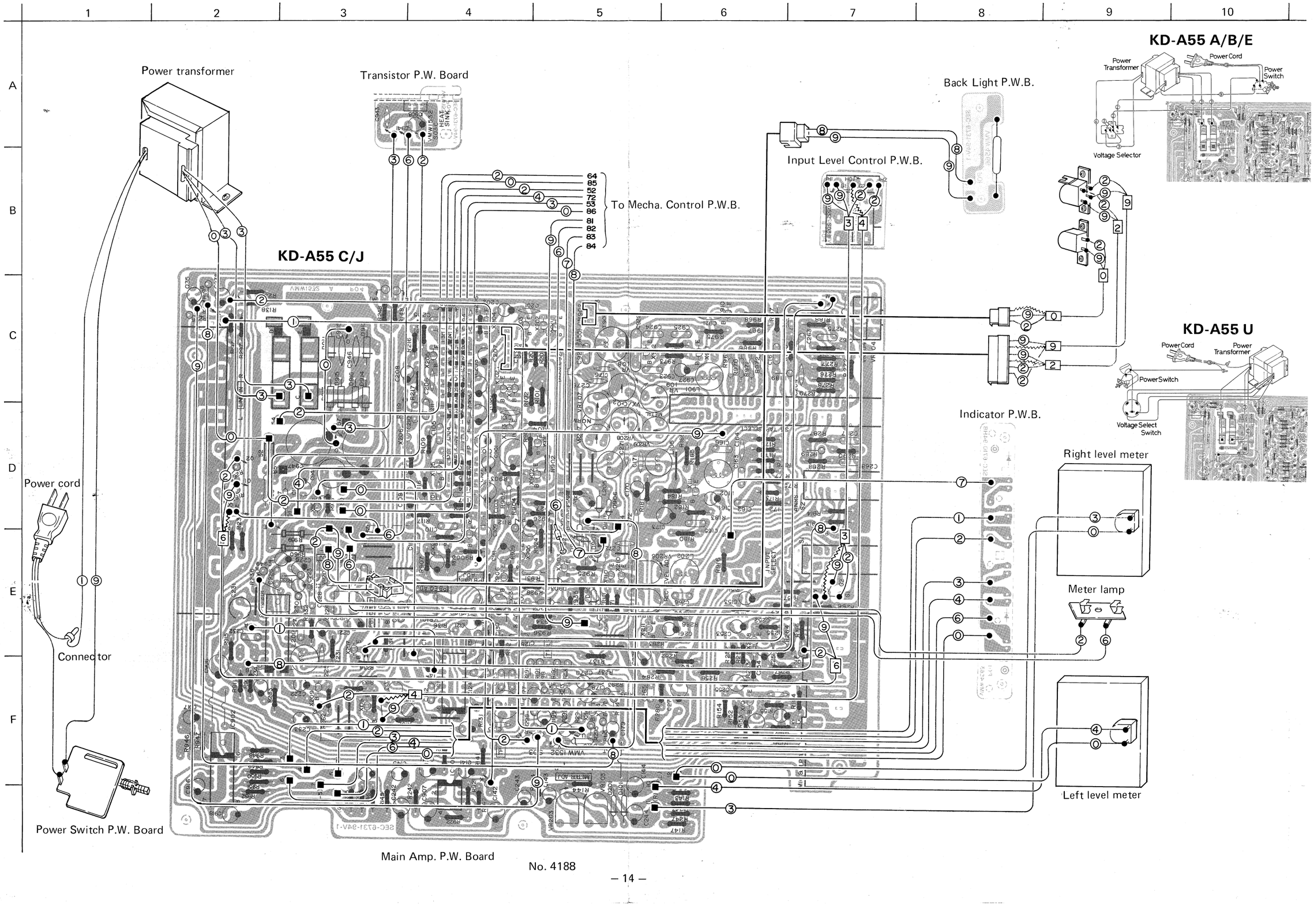
1. Unless otherwise specified, all resistors are 1/4 W, ±5% carbon resistors.
   And all capacitors are 50 V fixed ceramic capacitors or 50 V mylar capacitors.
2. UF — Unflammable carbon resistor
   MF — Metal film resistor
   OMF — Oxided metal film resistor
   Ta — Tantalum solid electrolytic capacitor
   LL — +20% low leak current electrolytic capacitor
   PP — Polypropylene capacitor
   PS — Polystyrene capacitor
   MM — Metallized mylar capacitor
   NP — Non-polarized electrolytic capacitor
3. Blue line shows the signal at playback.
   Red line shows the signal at recording and +B circuits.
4. ▒▒ parts are safety assurance parts. When replacing those parts, make sure to use the specified one.

Wiring Connector (1)



No. 4188

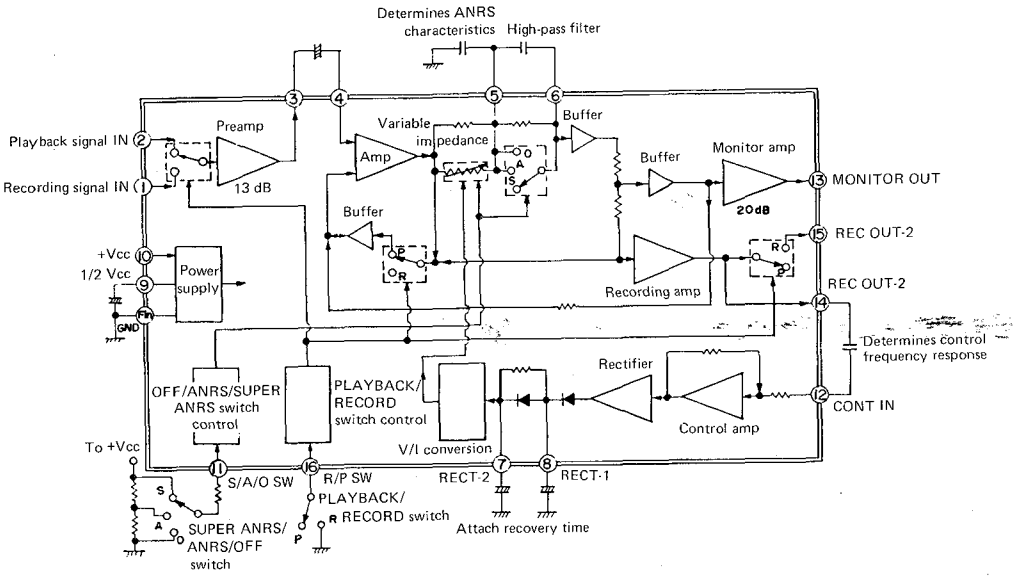
Wiring Connector (2)



– AN7362 –

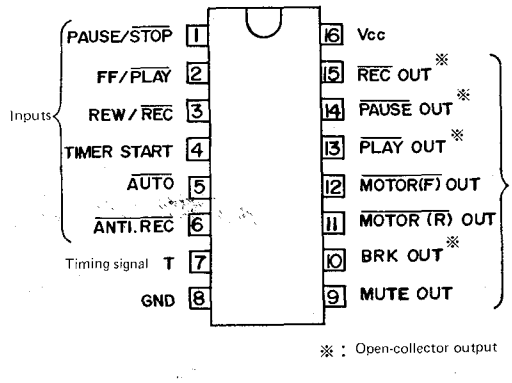
(Continued from page 10)

Block diagram

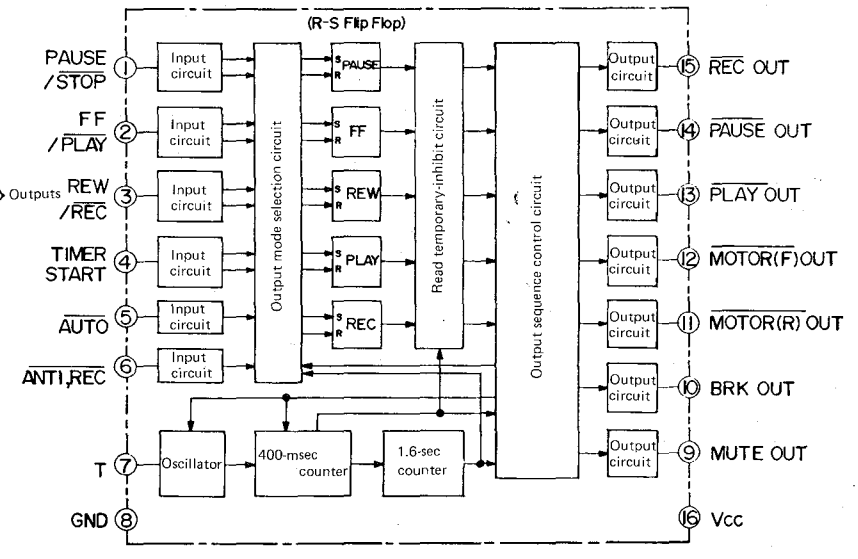


– M54886P –

Top view



Block diagram

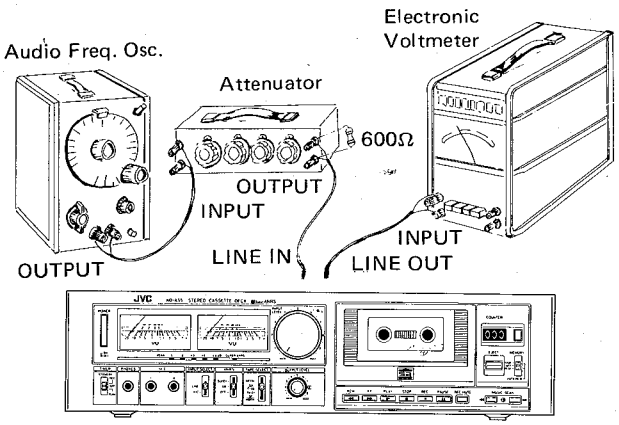


Main Adjustments

[I] Equipment and measuring instruments used for adjustment

1. Electrical adjustment

1) Electronic voltmeter
2) Audio frequency oscillator
   (range: 50—20 kHz and output 0 dB with impedance 600 Ω)
3) Attenuator
4) Standard tapes for REC/PB
   Maxell UD — SF tape
   TDK SA — SA tape
   SCOTCH METAFINE — Metal tape
   } or equivalent
5) Reference tapes for playback (JVC Test Tape)
   VTT-658 (for head azimuth adj.)
   VTT-656 (for motor speed, wow flutter adj.)
   VTT-664 (for Reference Level 1 kHz)
   VTT-675N (for playback frequency response)
6) Resistors
   100 Ω (for measurement of the bias current)
   600 Ω (for attenuator matching)



KD-A55

2. Mechanical adjustment

1) Gauge for checking the head position.
2) Torque gauge
3) Blank tape (C-120) for tape running checker.

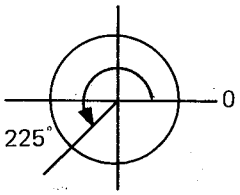
[II] Adjustment and repair of the mechanism

TROUBLESHOOTING HINTS

1. Azimuth adjustment and head replacement

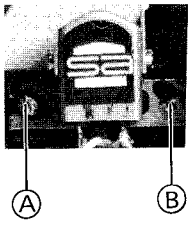
1) Remove the wires of the control switches from the wire clamps after having removed the top cover.
2) Remove 3 screws positioned below the control switches (on the bottom of the deck) and pull the control section forwards.
3) With the control section pulled out, azimuth adjustment and/or head replacement can be performed.
   With the JVC cassette deck series of KD-A6, KD-A5 and KD-A8 models, the adjustment of replacement can be performed more easily than with conventional cassette decks which require removal of the entire mechanical section for the adjustments and/or replacements.

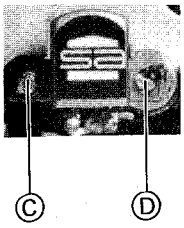
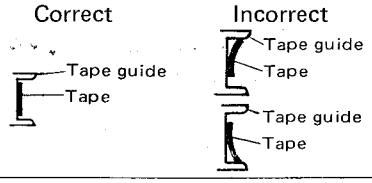
2. Tape-to-head contact adjustment



1) Turn the adjusting screw for aligning the erase head until it stops. Then, turn the screw in the reverse direction by 225° (a 5/8 revolution).
2) Check the tape-to-head contact using a C-120 tape having pads.
3) Check it again with a Metal tape.
   Checking method:
   Record a 400 Hz or 1 kHz signal with 0 VU + 20 dB. Erase the recording. Checking if the erasing is satisfactorily performed.
4) After adjustment, apply screw bond on the adjusting screw to prevent its loosening.

(Adjust the mechanism or confirm that it is in normal operating condition prior to the adjustment of the electrical circuit.)

Item	Adjustment	Adjusting point	Standard value	Remarks
Adjusting record/playback head position 	1. Connect an electronic voltmeter to the LINE OUT terminals. 2. Play back the VTT-658 test tape. 3. Adjust the head angle with the screw Ⓐ until the reading of the electronic voltmeter becomes maximum for both channels. 4. After adjusting, set the screw with screw bond.	Screw Ⓐ	Maximum	If the head is worn, disconnected or exceedingly magnetized so as not to provide the necessary characteristics, replace it with a new one. After replacement, the head position adjustment as well as the playback level adjustment, the bias current adjustment and the recording level adjustment are all necessary. If the output difference between the left and right channels exceeds 3 — 4 dB, the head is defective. Replace it with a new one.

Item	Adjustment	Adjusting point	Standard value	Remarks
Adjusting erase head height 	Employ a special cassette (C-120) from which parts of the casing, where the erase head, record/playback head and capstan engage, has been cut away. Perform tape transport with the cassette tape. Adjust the screw Ⓒ until the tape runs in the center of the erase head tape guide. (See "Troubleshooting hints" aforesaid.) 	Screw Ⓒ		Be sure to perform this adjustment after replacing the erase head.
Adjusting motor speed	Connect a speed meter (an electronic counter) to the LINE OUT terminals. Play back the VTT-656 test tape. Adjust the semi-fixed ressistor in the motor until the reading of the speed meter is 3000 Hz.	Semi-fixed resistor in the motor	3000 Hz	If the speed meter functions as a wow and flutter meter, also, connect the deck to the INPUT terminals of the meter.
Checking playback torque	Employ a torque testing cassette tape for the checking, or remove the cassette cover and use a torque gauge.		40—70 gr-cm	If the standard torque is not obtained, replace the take-up disc assembly.
Checking fast forward torque	Measure the torque in the fast forward mode in the same manner as in the above.		More than 70 gr-cm	If the standard torque is not obtained, perform the following. 1. Clean the capstan belt, the idler circumference, the motor pulley, the take-up reel disc circumference, the flywheel circumference, etc. 2. Replace the belt and idler.
Checking rewind torque	Measure the torque in the rewind mode in the same manner as in the above.		More than 70 gr-cm	If the standard torque is not obtained, clean the capstan belt, idler, motor pulley, flywheel circumference, rewinding idler circumference, left reel disc circumference, etc.
Checking wow and flutter	Connect a wow and flutter meter to LINE OUT terminals. Play back the VTT-656 test tape. Check to see if the reading of the meter is within 0.04% (WRMS).			If the reading becomes moving value even if conforming to the standard, a re-claim may be raised. Repairs are necessary.

[III] Repair of wow flutter

If wow and flutter increase, check the following points. If there is defect in revolving parts, the wow and flutter generated will increase in proportion to the number of revolutions.

Play a 300 Hz test tape, and defective part can be detected from the sound.

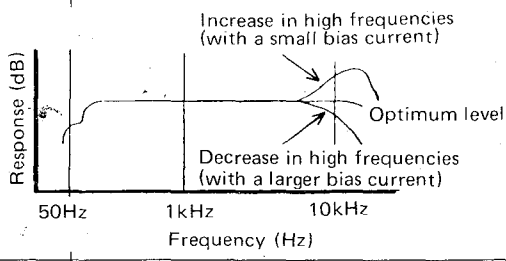
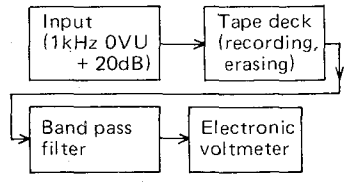
Section	Trouble	Repair
Capstan and flywheel	Capstan shaft has excessive run-out. Flywheel turns heavily. (shaft seisure, thrust play, etc.)	Replace flywheel. Clean the capstan shaft and the groove in the flywheel. Apply oil to the metal position. Replace the capstan assembly.
Pinch roller	Rough rotation (Deformation scratches, or dust) The angular position of the pinch roller is not correct. The pinch roller pressure is not correct.	Replace pinch roller, or pinch roller spring. Clean the pinch roller or apply oil to the rotary shaft. Adjust the pinch roller so that it is parallel with the capstan shaft. Replace the pinch roller spring.
Belt	Belt has undue run-out. Belt is dirty or slippery.	Clean the belt. Replace the belt.
Back tension	Back tension is irregular, or back tension is too strong.	Replace back tension spring (under supply disc).
Motor	Motor shaft has undue run-out. Motor pulley is oily and dusty.	Replace the motor. Clean the motor pulley.

[IV] Electrical circuit adjustment procedure

In the steps marked by an asterisk (*), adjustment should be performed, however, only checking is sufficient with steps other than those.

Adjustment should be performed in the order of steps 1, 2, 3, . . . Perform this adjustment with the ANRS switch set to OFF and output level control set to maximum.

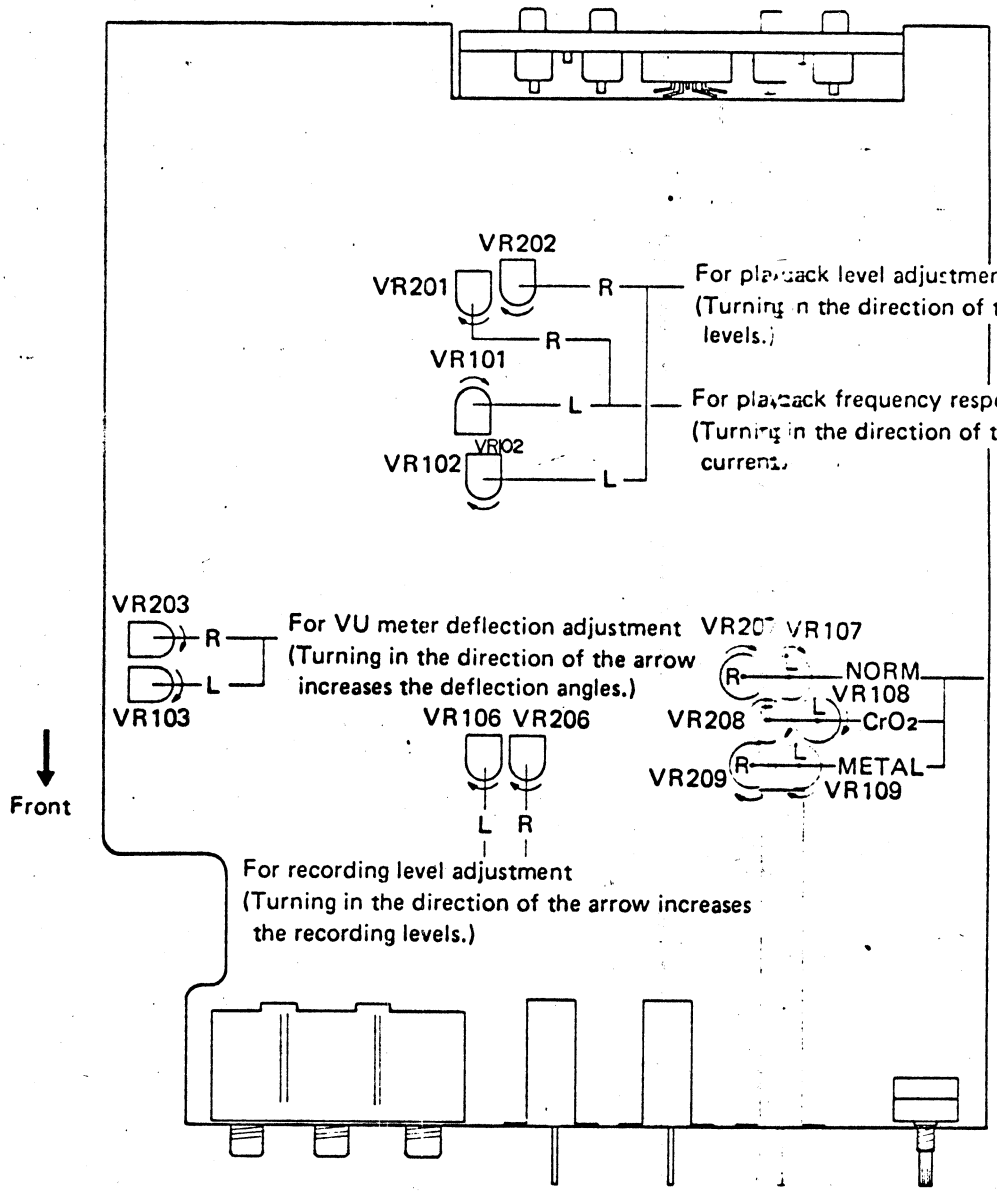
Step	Item	Adjustment	Adjusting point	Standard value	Remarks
1*	Adjusting playback level	1. Play back the VTT-664 Reference tape (1 kHz) with the tape select switch set to the SF/NORM position. 2. Adjust VR102 and VR202 until the LINE OUT becomes about –4 dBs.	VR102, 202	–4 dBs	This adjustment becomes necessary when a change in playback level results (for example, due to head replacement).
2*	Playback frequency response	Playback test tape VTT-675N (1 kHz, 10 kHz) for following adjustment. 1) Adjust VR101 and VR201 so that 10 kHz signal and 1 kHz signal gains become flat response.	VR101, 201		
3*	Adjusting VU meter deflection	1. Set the cassette deck to its recording mode. 2. Apply a 1 kHz, approx. –10 dBs signal to the LINE IN terminals. 3. Adjust the recording level controls until the signal is available at –4 dBs at the LINE OUT terminals. 4. Adjust VR103 and VR203 until the VU meters deflect to 0.	VR103, 203	0 VU	Perform the adjustment when the parts are replaced.

Step	Item	Adjustment	Adjusting point	Standard value	Remarks
4*	Checking record/playback frequency response	Record 1 kHz, 50 Hz and 12.5 kHz signals at an input level of 0 VU to −20 dB. Play back the tape. Check to see that the 50 Hz and 12.5 kHz signal output deviations fall within the standard range, using the 1 kHz signal output as a reference. 	For SF/NORM tape; VR107, 207 For SA/CrO_2 tape; VR108, 208 For Metal tape; VR109, 209	Reference frequency; 1 kHz 0 ± 3 dB at 50 Hz 0 ± 3 dB at 12.5 kHz	This checking should be performed for normal, chrome and metal tapes and for both right and left channels. 1. Bias current adjustment for a cassette deck should generally be performed referring to the record/playback frequency response. This is because the frequency response of a cassette deck depends more greatly upon the bias current than does that of an open reel deck. The current measuring method described below is an alternative one. 2. If the bias current is not properly adjusted, the record and playback characteristics become as shown left.
5	Adjusting recording level	1. Apply a 1 kHz, approx. −10 dB signal to the LINE IN terminals. Adjust the recording level controls until the signal is available at −4 dBs at the LINE OUT terminals. 2. After checking to see if the VU meters become to 0, record the signal applied to both left and right channels using normal tape. 3. Play back the recording part. Perform the recording signal adjustment with VR106 and VR206 so that the VU meters become to 0.	VR106, 206	0 VU	The level difference between left and right channels for SF/NORM tape, chrome tape and metal tape should be less than 1 dB (1 VU). Perform the adjustment using a normal tape, level difference between recording and playback for SA/CrO_2 and metal tapes, should be less than 1.5 dB, and that between left and right channels should also be less than 1 dB.
6	Checking record/playback signal distortion	1. Record a 1 kHz, −4 dBs signal to LINE IN terminals and perform recording with the VU meter becomes to 0. 2. Play back the recorded part. Check the output with a distortion meter to see if the value conforms to the standard value.		SF/NORM tape; Less than 1.2% SA/CrO_2 tape; Less than 3% Metal tape; Less than 2%	Be sure to perform this adjustment following bias current and recording level adjustments.
7	Checking signal to noise ratio in recording/playback	1. Record a 1 kHz, 0 VU signal. Stop the input by disconnecting from the terminal to perform non-signal recording. 2. Play back the recorded part. Measure the 0 VU recording output and the non-signal recording output for comparison using an electronic voltmeter. Check to see if the value conforms to the standard value.		SF/NORM, SA/CrO_2 and Metal tapes; More than 42 dB	Apply an output (−72 dBs) to the MIC terminals with the recording level controls set to maximum so that the VU meter becomes to 0.
8	Checking erasing coefficient	1. Apply a 1 kHz signal to the LINE IN terminals. Adjust the recording level controls until the VU meter becomes to 0. 2. Perform recording with the signal enhanced by 20 dB. 3. Erase a part of the recording. 4. Measure the output difference between the erased part and non-erased part to compare with an electronic voltmeter.		More than 65 dB	For the measuring, connect a band pass filter between the deck and the electronic voltmeter. 

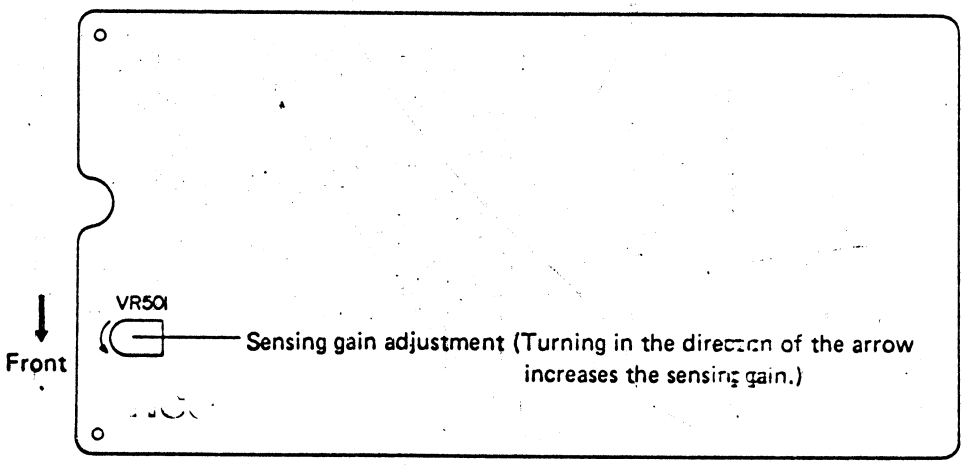
Step	Item	Adjustment	Adjusting point	Standard value	Remarks
9	Music Scan	Scan the first parts of reference tape TMT-6247, adjust VR501 so that the level of TP501 (1 pin of IC503) becomes +13 dBs.	VR501	+13 dBs	When scanning the reference tape TMT-6237, don't become the stop or playback mode with first part of tape. When scanning the reference tape TMT-6247, becomes the stop and playback mode with the final part of tape.

[V] Electrical circuit adjustment location

Main Amp. P.W. Board (Parts Ass'y side view)



Mecha. Control P.W. Board (Pattern printing side view)



Maintenance

To get long, trouble-free service, maintenance is important. Do not forget cleaning and demagnetizing.

Cleaning

After long use, the heads and tape part – capstan, pinch roller, etc. – will become dirty with dust or magnetic particles. Dirty heads cause imperfect erasing or high frequency drop-off. A dirty capstan and pinch roller will cause unstable tape speed, leading to increased wow and flutter. Always keep them clean by following the procedure below.

1. Heads.

1) Push Eject button to open the cassette holder.
2) Use the head cleaning stick-provided to wipe the surface where the tape comes into contact with the head. (It is effective to moisten the cotton with alcohol.)

2. Pinch roller and capstan

Do the same method as heads.

3. Cabinet

When the cabinet becomes dirty, wipe it with a soft cloth soaked with a neutral cleaning solution of a polishing cloth.

* Do not use thinner or benzine.

Demagnetizing

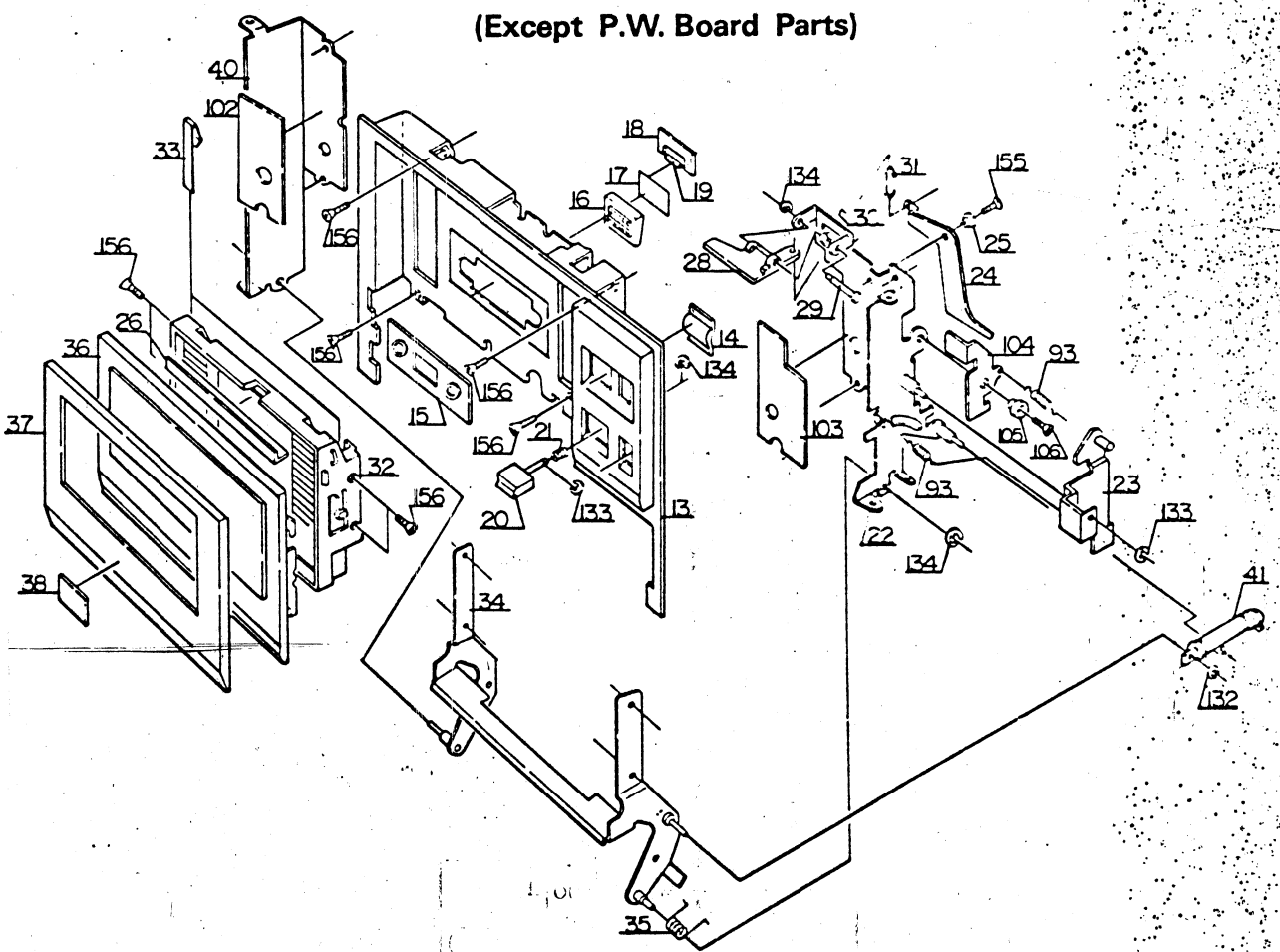
The heads are made from a material resistant to magnetization, but after long use they may become magnetized. A magnet brought into their vicinity can magnetize the heads, causing excess noise. If noise seems to have increased, demagnetize the heads with a head demagnetizer through the following procedure.

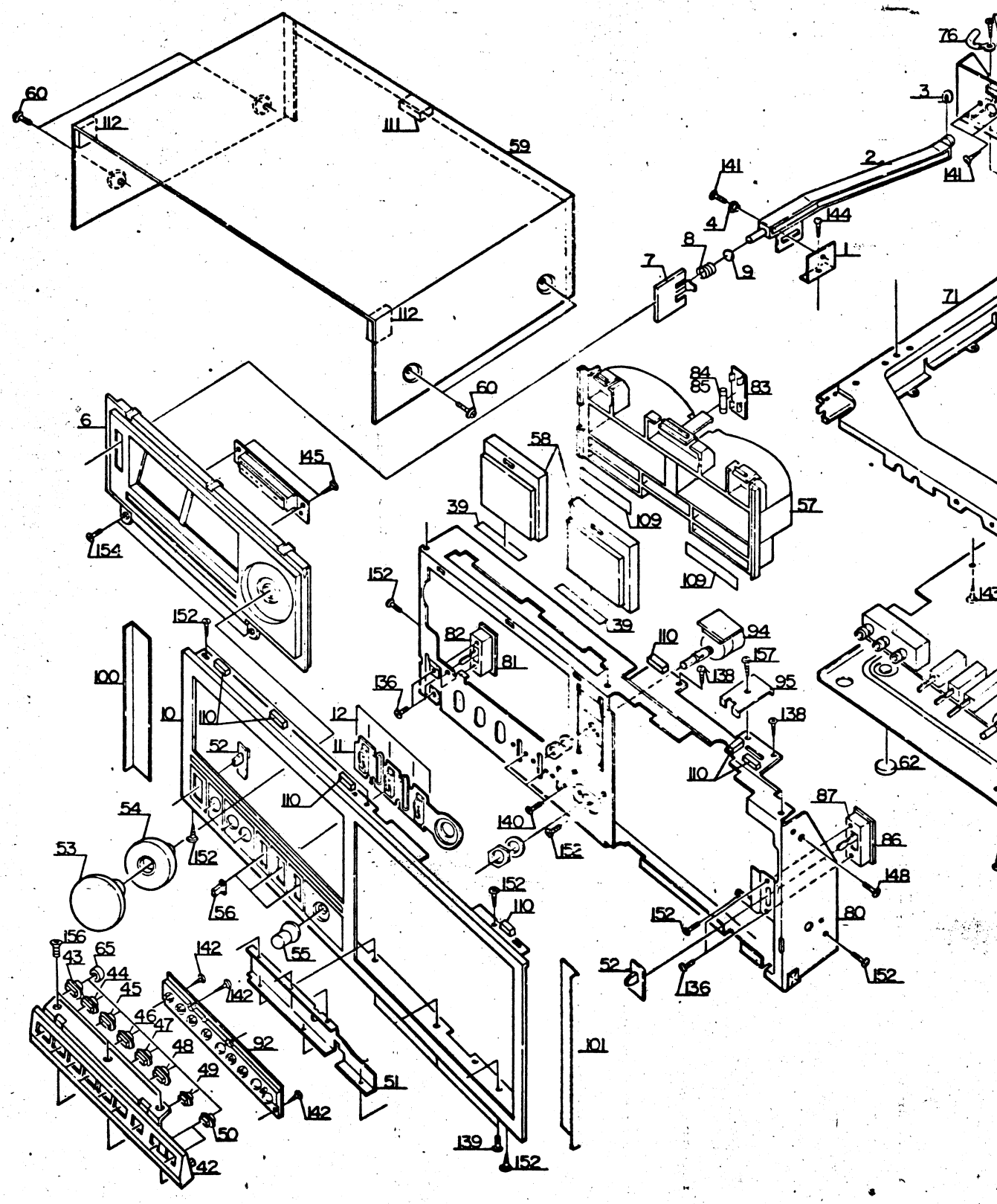
1. Turn the POWER switch OFF.
2. Wrap the tip of the demagnetizer with vinyl tape or soft cloth so as not to damage the head surface. Switch on the demagnetizer and bring it close to the head.
3. Move the tip of the demagnetizer slowly first to the left and right, then up and down in front of the head. Gradually move it away from the head and switch it off at a distance of more than 30 cm (12").
4. The erase head need not be demagnetized. The capstan shaft and tape guide should be demagnetized in the same way as the record playback head.

* Do not bring a magnetized metallic object (a screw driver, for example) near the head as this will increase noise.

Enclosure Assembly and Electrical Parts

(Except P.W. Board Parts)

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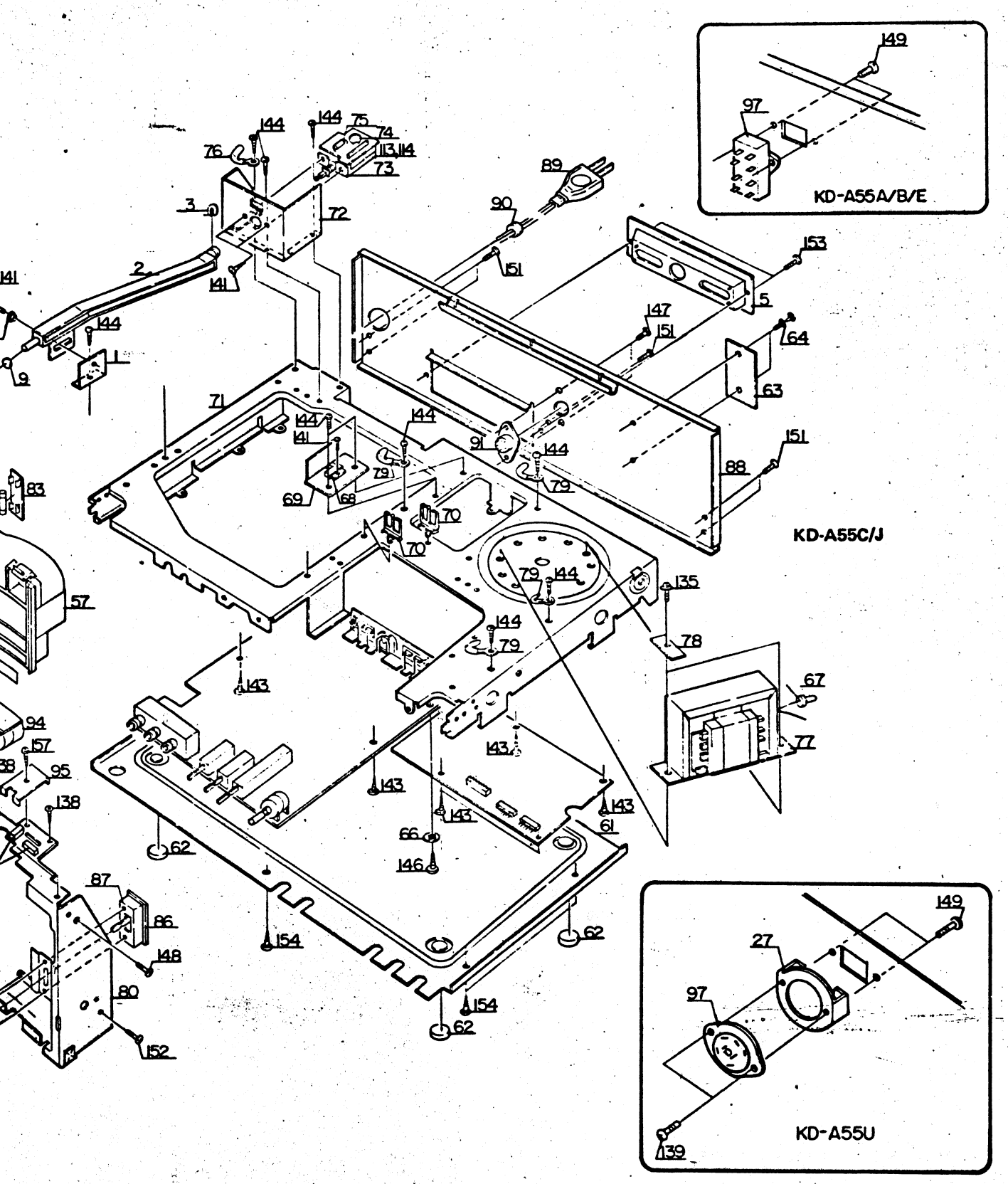
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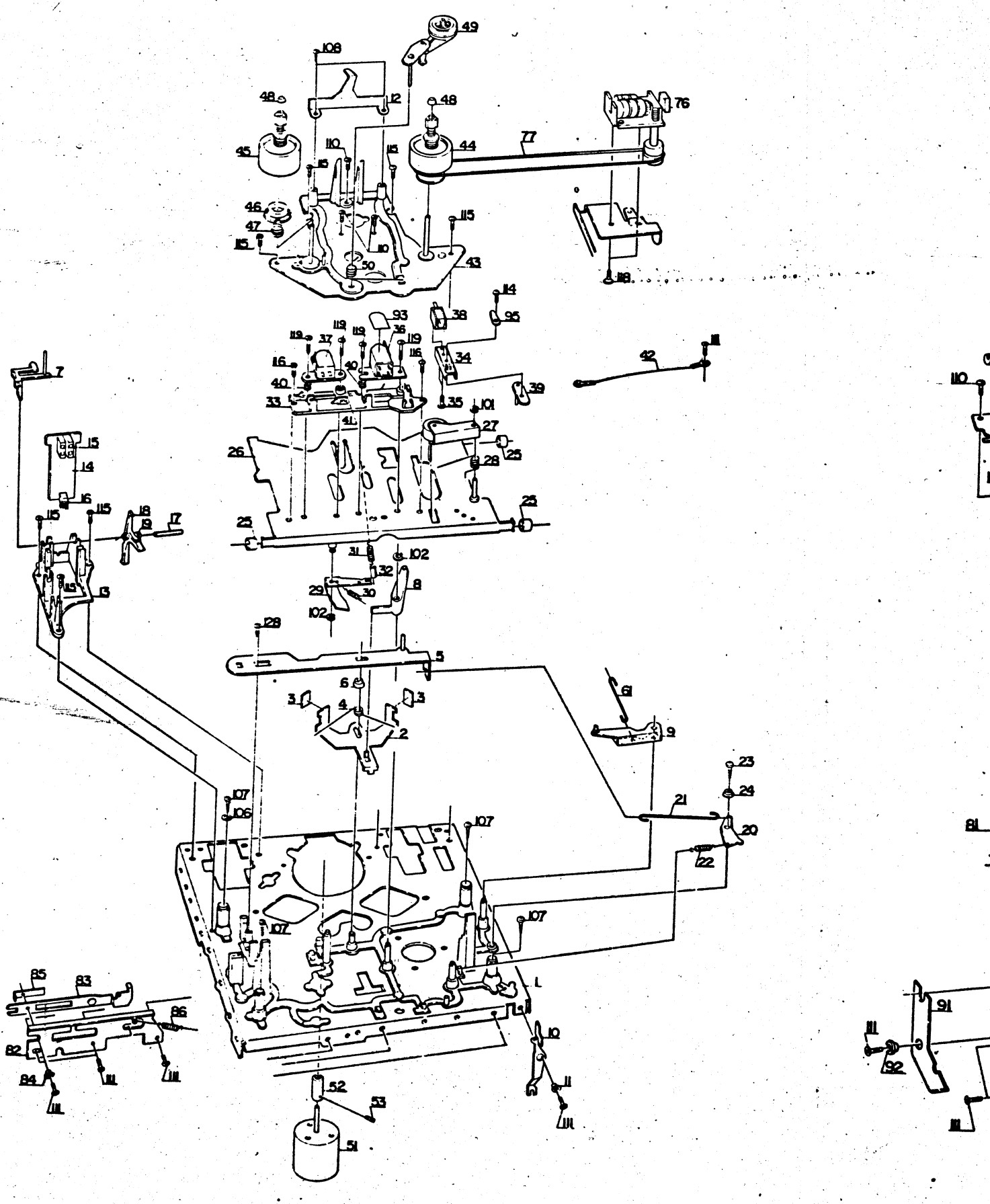
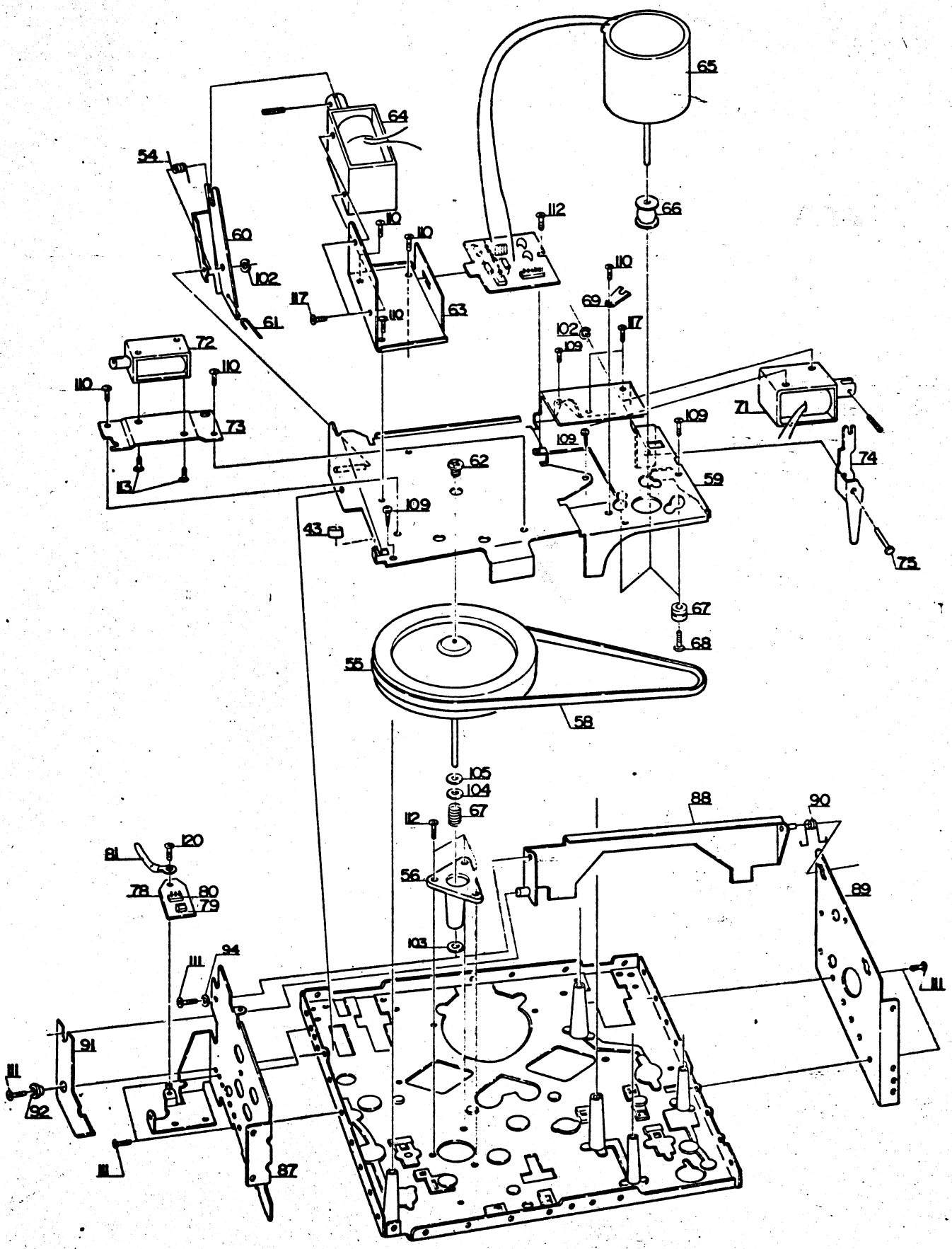
KD-A55U

Mechanical Component Parts

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Enclosure Assembly and Electrical Parts List

(Except P.W. Board Parts)

⚠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
1	*VKL4666-001	Guide Bracket		1
2	*VKS3116-001	Remote Bar	for Power Switch	1
3	VYTS404-001	Lock Plate		1
4	*VKH3001-032	Flange Collar		1
5	*VJD3213-002	Jack Escutcheon		1
6	*VJD2146-001	Meter Escutcheon		1
7	*VXP3051-002	Push Knob		1
8	*VKW3001-045	Compression Spring		1
9	VYSA2R6-004	Spacer	for Push Knob	1
(10–12, 100,101)	*ZCKDA55Y-CBF-1	Front Plate Sub Ass'y		1 set
10	*VJC1094-002	Front Plate	KD-A55A/B/E/U -003 = KD-A55C/J	1
11	*VJD3212-001	Lever Escutcheon		1
12	*VYTA451-001	Blind		1
13–17	*ZCKDA55Y-CBF-2	Mecha. Cover Sub Ass'y		1 set
13	*VJD2147-002	Mecha. Cover		1
14	*VJK4118-001	Counter Lens		1
15	*VJD4349-001	Disk Plate		1
16	*VJD4348-001	Tape Indicator		1
17	VYTN402-001	Sheet		1
18	VMW4566-001	P.W. Board	for Back Light	1
19	QLP3601-003	Lamp	"	1
20	*VXP4061-00A	Push Knob Ass'y	for Eject	1
21	*VKW3001-028	Compression Spring		1
22	*VKL3226-00B	Bracket (R) Ass'y		1
23	*VKL4756-00A	Eject Lever Ass'y		1
24	*VKL4669-002	Eject Arm		1
25	VKH4253-001	Flange Collar	Eject Arm	1
26	*VKL4754-001	Bracket	for Cassette Holder	1
27	VKL4275-001	Bracket	for Voltage Selector (KD-A55U)	1
28	*VKS4200-002	Lock Lever		1
29	*VKH4261-001	Shaft		1
30	*VKW4196-001	Torsion Spring		1
31	*VKW4195-001	Wire		1
32	*VJT2038-002	Cassette Holder		1
33	*VKY4173-002	Cassette Spring		2
34	*VKL3228-00A	Holder Arm Ass'y		1
35	*VKW4194-004	Holder Spring		1
36–38	*ZCKDA55Y-CCA	Cassette Lid Ass'y		1 set
36	*VJT3049-001	Cassette Lid		1
37	*VJT3050-002	Lid Plate	KD-A55A/B/E/U -001 = KD-A55C/J	1
38	TJL344518-02	SA Mark	for Lid Plate	1
39	VYSA1R8-045	Spacer		4
40	*VKL4667-001	Bracket (L)		1
41	*VKS4002-00A	Air Dump Ass'y		1
42	*VJD2148-001	Button Case		1
43	VXP3046-001	Push Button	for REW	1
44	" -002	"	for FF	1
45	" -003	"	for PLAY	1
46	" -004	"	for STOP	1
47	" -005	"	for REC	1
48	" -006	"	for PAUSE	1
49	VXP3056-001	"	for REC. MUTE	1
50	" -001	"	for SCAN	2

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
51	*VKL4689-001	Bracket		1
52	*VXS4031-001	Slide Knob	for Timer & Memory	2
53	*VXL4101-00A	Knob Ass'y	for Input (L)	1
54	*VXL4102-00A	"	for Input (R)	1
55	*VXL4103-00A	"	for Output	1
56	*VXQ4030-001	Lever Knob		3
57	*VKS2107-001	Lamp Hood		1
58	*VGM0110-013	Level Meter		2
59	*VKL1138-001	Top Cover		1
60	VKZ3001-002	Special Screw		4
61	*VKL1167-001	Bottom Cover		1
62	VJF4003-001	Foot		4
63	*VYN2059-003GA	Name Plate	KD-A55A	1
	VYN2059-002GA	"	KD-A55B	1
	" -004GA	"	KD-A55C	1
	" -005GA	"	KD-A55E	1
	" -006GA	"	KD-A55J	1
	" -007GA	"	KD-A55U	1
64	E48729-002	Plastic Rivet	for Name Plate	2
65	VKS4001-001	Button Spacer		9
66	WBS3000	Washer	for Earth	1
67	⚠ TAW000504-01	Connector	for Power Cord	1
68	⚠ UPC78M15H	IC	IC903	1
69	VKL4771-001	Heat Sink	for IC903	1
70	QHW3059-001	Wire Clamp		2
71	*VKL1164-00A	Amp Chassis Ass'y		1
72	*VKL3224-001	Power Bracket	for Power Switch	1
73	⚠ *QSP2111-011	Push Switch	for Power Switch KD-A55A/E	1
	⚠ " -011BS	"	" KD-A55B	1
	⚠ QSP1110-222	"	" KD-A55C/J	1
	⚠ " -221	"	" KD-A55U	1
74	QFZ9010-103	M.P. Capacitor	C01, 02	2
75	⚠ QRD149J-820S	Unflammable Resistor	82 Ω, ¼ W	1
76	⚠ VKZ4001-011	Wire Holder		1
77	⚠ *VTP66C3-023B	Power Transformer	KD-A55A/E	1
	⚠ *VTP66C3-021BBS	"	KD-A55B	1
	⚠ *VTP66A3-011K	"	KD-A55C/J	1
	⚠ VTP66U3-021B	"	KD-A55U	1
78	F4932-002	Special Washer	for Power Transformer	2
79	VKZ4001-011	Wire Holder		1
80	*VKL1166-001	Front Bracket		1
81	VMW4569-001	P.W. Board	for Timer Switch	1
82	*QSS2301-102	Slide Switch		1
83	QMG1121-003	Lamp Holder		1
84–85	*VGZ0001-003	Lamp Ass'y		1 set
84	*QLP4101-008	Lamp		1
85	VJZ4006-002	Lamp Shade		1
86	*VMW4568-001	P.W. Board	for Memory Switch	1
87	*QSS2301-102	Slide Switch		1
88	*VKL2122-001	Rear Panel	KD-A55C/J	1
	VKL2122-002	"	KD-A55A/B/E/U	1
89	⚠ QMP2560-200	Power Cord with Plug	KD-A55A	1
	⚠ QMP9017-008BS	Power Cord	KD-A55B	1
	⚠ QMP1200-200	Power Cord with Plug	KD-A55C/J	1
	⚠ QMP3900-200	Power Cord	KD-A55E	1
	⚠ QMP7600-200	Power Cord with Plug	KD-A55U	1
90	⚠ QHS3876-162	Strain Relief	KD-A55A/E/C/J/U	1
	⚠ QHS3876-162BS	"	KD-A55B	1

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
91	QMC0888-008	DIN Socket Ass'y	for Remote Control	1
92	*VST0004-001	Switch Unit Ass'y		1
93	VKW3002-045	Tension Spring	for Eject Lever x 1, for Lever x 1	2
94	QVE5A3A-024F	V. Resistor	Input Level Control	1
95	VKL4713-001	Bracket		1
96	QHW3059-001	Wire Clamp		1
97	⚠ QSS2325-011	Slide Switch	Power Selector KD-A55A/E	1
	⚠ QSS2325-011BS	"	" KD-A55B	1
	⚠ QSR0084-001	Voltage Select Switch	" KD-A55U	1
98	VYSA1R8-041	Spacer		1
99	VYSA1R8-044	"		2
100	*VJD3224-001	Side Fitting	KD-A55A/B/E/U	1
101	*VJD3224-002	"	KD-A55A/B/E/U	1
102	VKZ4011-001	Sheet	Left Bracket	1
103	VKZ4012-001	"	Right Bracket	1
104	VKL4752-001	Lever		1
105	VKH4253-001	Collar		1
106	VKZ4128-001	Special Screw		1
107	VKH3005-036	Flange Shaft (B)		1
108	—	—	Blank No.	
109	VKZ4010-001	Sheet	for Meter	2
110	VYSH106-028	Spacer	for Front Plate	7
111	VYSH108-008	Spacer	for Top Cover	1
112	VYSH104-011	Spacer	for Top Cover	2
113	⚠ *VMW4570-001	P.W. Board	for Power Switch	1
114	E40130-001	Tab		4
131	Q03095-205	Washer	for Back Light	1
132	REE2000	E-ring	for Flange Shaft	1
133	REE2500	"	for Eject Knob x 1, Eject Lever x 1, Air Dump Ass'y x 1 Shaft x 1, Flange Shaft x 1	5
134	—	—	Blank No.	
135	DPSP4010ZS	Screw	for Power Transformer	2
136	LPSP2604Z	Screw	for Memory Switch x 2, Slide Switch x 2, Timer Switch x 2	6
137	LPSP2605Z	"	for Front Plate — Bracket	4
138	LPSP2606C	"	for Mecha. Front Bracket	2
139	LPSP2606Z	"	for Bracket x 3, Voltage Select SW (KD-A55U) x 2	5
140	LPSP3006VS	"	for Lever Switch	3
141	LPSP3008ZS	"	for Power Switch x 2, Lock Plate x 1	3
142	SBSB2610Z	Tapping Screw	for P.W.B.	3
143	SBSB3006V	"	for Main P.W.B. x 3, Mecha. Control P.W.B. x 4	7
144	SBSB3006Z	"	for Switch Bracket x 3, Wire Holder x 6, Guide Bracket x 1, Heat Sink x 2	12
145	SBSB3008V	"	for LED P.W.B.	2
146	SBSB3008Z	"	for Back Light x 1, Main P.W.B. x 1	2
147	SDSP2605R	Screw	for DIN Socket (Remote Control)	2
148	SDSP3006CS	"	for Counter Bracket — Front Bracket	1
149	SDSP3006RS	"	for Voltage Select Switch (KD-A55A/B/E)	2
150	SDSB3006C	"	for Mecha. — Amp Chassis	4
151	SDSB3006R	"	for Rear Panel	5
152	SDSB3006Z	"	for Front Plate — Front Bracket x 5, Front Bracket — Amp Chassis x 4, Guide Bracket x 1	10
153	SDSB3008R	"	for Jack Escutcheon	2
154	SDSB3008Z	"	for Meter Escutcheon — Front Bracket x 2, Bottom Cover x 5	7
155	SSSP2604Z	"	for Eject Arm	1
156	SSSP2605R	"	for Meter Cover x 4, Cassette Holder x 4, Bracket x 3	11
157	SSSP2606C	"	for Bracket	1

Mechanical Component Parts List

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
1	VKL1118-00D	Chassis Base Ass'y		1
2	VKL4361-002	Brake Bar		1
3	VYSF101-012	Spacer		2
4	VKW4145-001	Brake Bar Spring	for Brake Bar	1
5	VKL4362-001	Lock Bar		1
6	VKZ4005-001	Stopper	for Brake Bar	1
7	VKS4166-001	Cassette Switch Lever		1
8	VKS4135-00A	Lock Lever Ass'y		1
9	VKL4366-00A	Play Arm Ass'y		1
10	*VKL4681-001	Pause Solenoid Lever		1
11	VKH3001-027	Flange Collar		1
12	VKY4174-001	Cassette Spring		1
13	VKS3109-001	Switch Holder (L)		1
14	VMW4522-001	P.W. Board (L)		1
15	QSP0029-001	Slide Switch		2
16	QMV5004-004	Connector		1
17	*VKH4264-001	Shaft		1
18	VKS4136-002	Switch Lever		1
19	VKW4138-001	Pressure Lever Spring		1
20	VKL4399-001	Eject Safety Lever		1
21	VKW4142-001	Connecting Wire		1
22	VKW3002-039	Spring		1
23	GPSA2608Z	Tapping Screw		1
24	VKH3001-027	Collar		1
25	VKZ3003-001	Rubber Tube		3
26	*VKL4676-00A	Slide Base Ass'y		1
27	*VKP4108-00A	Pinch Roller Arm Ass'y		1
28	*VKW4202-001	Pinch Roller Spring		1
29	VKL4678-002	Kick Lever		1
30	VKW3002-004	Spring		1
31	VKW3002-044	Tension Spring	for Slide Base	1
32	TJN265559-02	Silencer	"	1
33	*VKS2108-001	Head Mount Base		1
34	*VKS4202-002	Head Base		1
35	SPSK1730M	Mini Screw		2
36	*ZMM074401-0D	R/P Head Ass'y		1
37	*ZMM090414-0A	E. Head Ass'y		1
38	*VGH0214-101	Sensor Head Ass'y		1
39	*VKL4679-00B	Slide Plate Ass'y		1
40	VKW3001-020	Compression Spring	for R/P Head and E. Head	2
41	VKH4215-001	Head Collar		1
42	VMZ0008-00A	Wire Ass'y		1
43	VKL3155-00A	Reel Disk Bracket Ass'y		1
44	VKR4113-00A	Take-up Reel Ass'y		1
45	VKR4118-00A	Supply Reel Ass'y		1
46	VKS4130-001	Back Tension Base		1
47	VKW3001-026	Compression Spring	for Back Tension	1
48	VKS4131-001	Reel Stopper		2
49	VKS4151-00B	Idler Ass'y Unit		1
50	VKW4134-001	Idler Spring		1
51	MDN-7V1-2	Reel Motor		1
52	VKR4121-001	Motor Pulley		1
53	YRS2603B	Screw	for Motor Pulley	1
54	VKW4149-001	Play Solenoid Spring		1
55	VKF3107-00B	Flywheel Ass'y		1

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
56	VKF3103-00B	Capstan Metal		1
57	T30301-137	Spring		1
58	VKB3001-007	Capstan Belt		1
59	*VKL4684-00A	Hold Base Ass'y		1
60	VKL4368-002	Play Solenoid Lever		1
61	VKW4137-001	Connecting Wire		1
62	TEP357456-01	Thrust Screw		1
63	VKL4398-002	Play Solenoid Bracket		1
64	VGP0301-002	DC Solenoid Ass'y		1
65	MMC-6A2HS	DC Motor	for Capstan	1
66	VKS4139-002	Motor Pulley		1
67	TER357465-03	Cushion Rubber		3
68	VKZ4109-001	Motor Screw		3
69	TFB345469-01	Rubber Stopper		1
70	VKZ4001-011	Wire Holder		1
71	VGP0201-005	DC Solenoid Ass'y	for Brake	1
72	VGP0201-006	"	for Sensor Head	1
73	VKL4478-001	Pause Solenoid Bracket		1
74	VKL4363-002	Lock Solenoid Lever		1
75	VKH4194-002	Shaft		1
76	VKC6111-001T	Counter Ass'y		1
77	VKB3000-012	Counter Belt		1
78	VMW4530-002	P.W. Board		1
79	DN6835	Hall IC		1
80	QMV5005-003	Connector		1
81	VKZ4001-010	Wire Holder		1
82	*VKL4671-001	Guide Bracket		1
83	*VKL4672-00A	Slide Lever Ass'y		1
84	VKH3001-027	Flange Collar		1
85	*VKL4675-001	Push Lever Bracket		1
86	VKW3002-045	Spring		1
87	VKL3230-002	Side Bracket (R)		1
88	VKL4403-00B	Shift Arm Ass'y		1
89	VKL4682-001	Side Bracket (L)		1
90	VKW4156-001	Shift Arm Spring		1
91	*VKL4701-001	Shift Lever		1
92	VKH3001-027	Flange Collar		1
93	THC037417-02	Head Plate		1
94	VHK3001-033	Flange Collar		1
95	VKY4182-001	C. Spring		1
101	REE2000	E-ring	Pinch Roller Arm	1
102	REE2500	"	Lock Lever Ass'y x 1, Kick Lever x 1, Play Solenoid Lever x 1, Lock Solenoid Lever x 1	4
103	Q03093-522	Washer	Flywheel	1
104	" -621	"	"	1
105	" -827	"	"	1
106	WNB2600N	"	Slide Base Ass'y	1
107	GPSA2612Z	Tapping Screw	Slide Base	4
108	SBSB2006Z	"	Cassette Spring	2
109	SBSB2616Z	"	Hold Base	4
110	LPSP2604Z	Screw	Reel Motor x 3, Play Solenoid Bracket x 3, Rubber Stopper x 1, Pause Solenoid Bracket x 2	9

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
111	LPSP2605Z	Screw	Pause Solenoid Lever x 1, Wire Ass'y x 1, Hold Base x 1, Guide Bracket x 3, Slide Lever Ass'y x 1, Side Bracket (R) x 1, Side Bracket (L) x 3	12
112	LPSP2606Z	"	Capstan Metal x 3, Shift Lever x 1	4
113	LPSP3004ZS	"	Solenoid (for Sensor Head)	2
114	SPSP2004Z	"	Sensor Head	1
115	SPSP2605Z	"	Switch Holder x 3, Reel Ass'y Unit x 4	7
116	SPSP2006Z	"	Head Mount Base	2
117	SPSP3003ZS	"	Solenoid x 2, Brake Solenoid x 2	4
118	SSSP3006Z	"	Counter Ass'y	2
119	SPSX2010Z	"	Wire Ass'y	1
120	SDSP2605Z	"	Hall IC P.W. Board	1

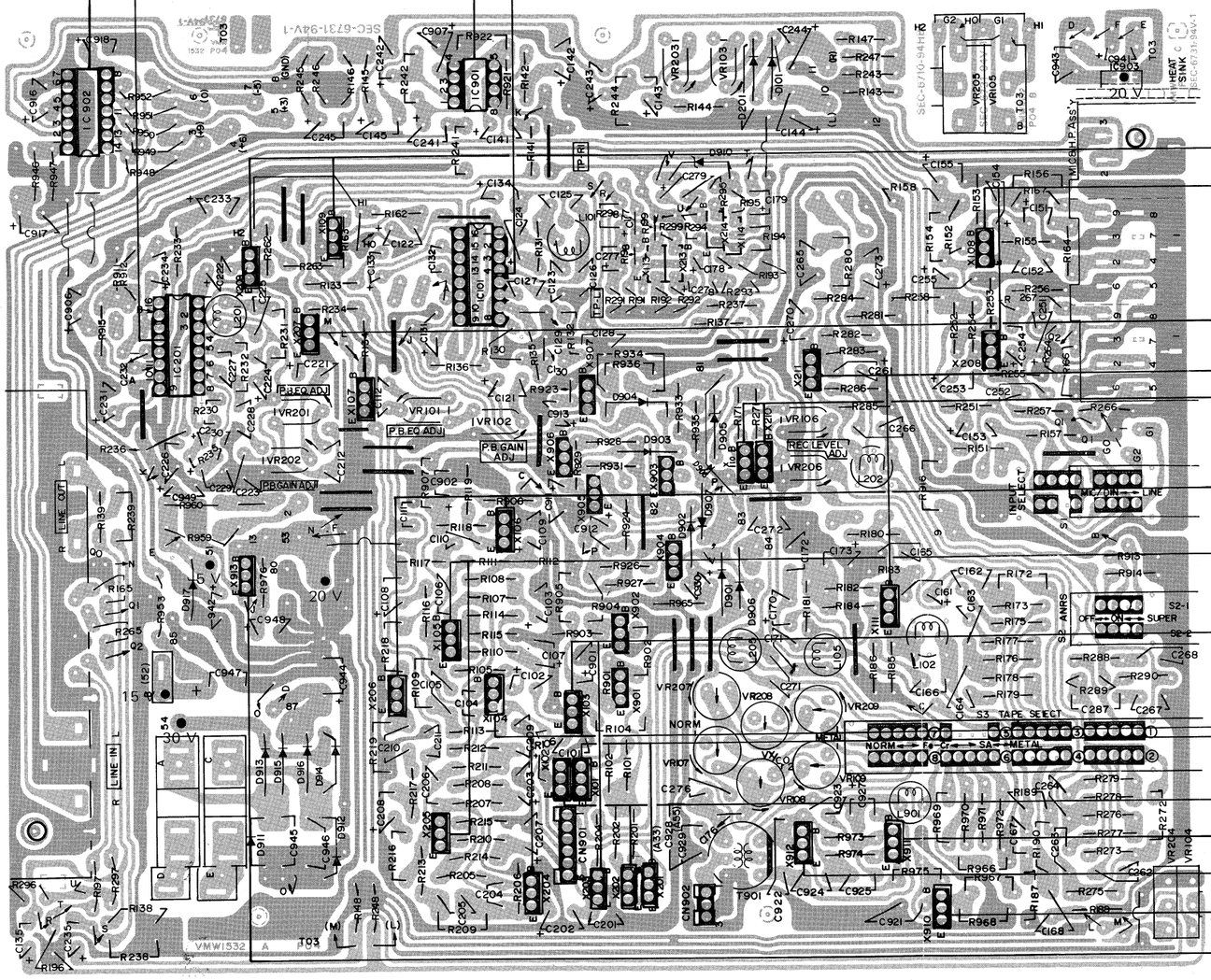
Main Amp. P.W. Board Parts

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IC101	C. Tester	5.7	5.7	9.0	6.0	9.3	9.3	9.2	9.2	9.3	19.4	1.4	9.1	9.5	9.6	9.6	0.4
IC201	E. Voltmeter	9.1	8.5	9.0	8.4	9.3	9.3	9.2	9.2	9.3	19.4	1.5	9.1	9.5	9.6	9.6	0.5
IC902	C. Tester	0.02	0	0	2.7	2.7	0	0	14.8	0.6	0.6	0.6	0.6	0.6	0.03		
	E. Voltmeter	0.02	0	0	2.7	2.7	0	0	14.8	0.6	0.6	0.6	0.6	0.6	0.03		
IC901	C. Tester	9.6	9.6	8.0	0	8.0	9.6	9.6	19.2								
	E. Voltmeter	9.6	9.6	9.6	0	9.6	9.6	9.6	19.2								

Voltage values are measured by the following meter without input signal at playback mode.

C. Tester = Circuit Tester (20 kΩ impedance)

E. Voltmeter = Electronic Voltmeter



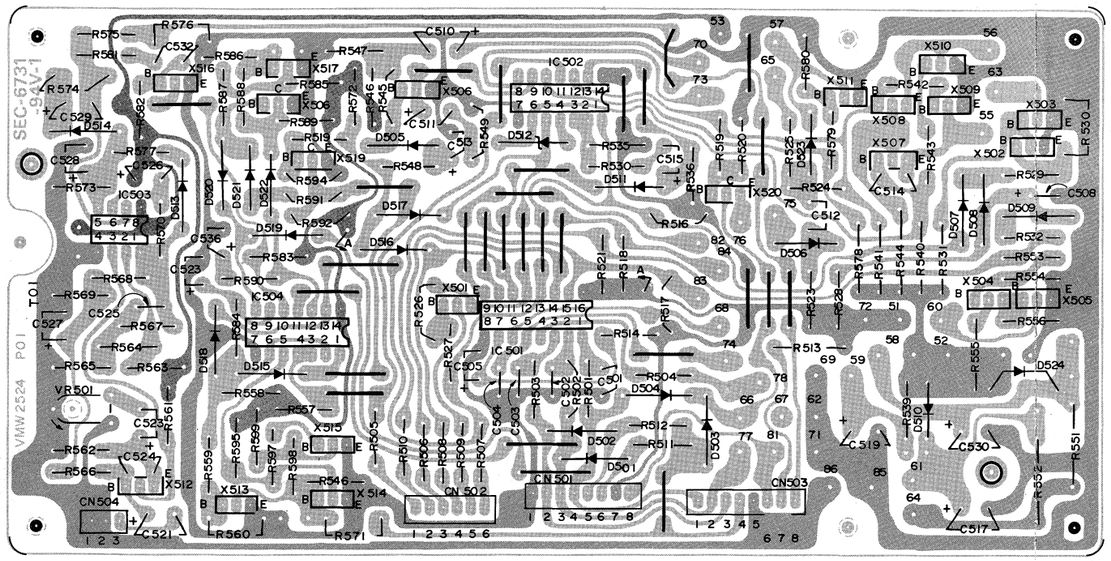
	C. Tester			E. Voltmeter		
	E	C	B	E	C	B
X109 209	0	0	0	0	0	0
X108 208	1.7	6.8	1.6	1.7	6.8	2.3
X107 207	0	0	0	0	0	0
X111 211	1.7	6.4	0.2	1.7	6.4	2.3
X110 210	0	0	0	0	0	0
X106 206	0	0	0.6	0	0	0.6
X105 205	1.0	12	1.6	1.0	12	16.3
X103 203	0	0	0.7	0	0	0.7
X104 204	0.03	1.63	0.3	0.03	1.63	0.6
X101 201	0	0	0	0	0	0
X102 202	0	0	0	0	0	0

	C. Tester			E. Voltmeter		
	E	C	B	E	C	B
X911	0.5	18.4	−1.2	0.5	18.4	−1.2
X912	0.5	18.4	−1.2	0.5	18.4	−1.2
X910	0	0	0.7	0	0	0.7
X913	19.2	20.0	19.8	19.2	20.0	19.8

	X901			X902			X903			X904			X905			X906			X907		
	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
C. Tester	20.0	0	19.8	0	19.8	0	0.03	19.9	0.45	0	6.4	0.03	0	20		20	0		0	0	0.7
E. Voltmeter	20.0	0	19.8	0	19.8	0	0.03	19.9	0.45	0	6.4	0.03	0	20		20	0		0	0	0.7

No. 4188

Mecha. Control P.W. Board Parts



		STOP	FF	REW	PLAY	REC	PLAY PAUSE	REC PAUSE	Forward Scan	Reverse Scan	Remarks
IC502-2	Input	L	H	H	H	H	L	L	H	H	Same as BRK OUT (pin 10 of IC501)
	Output	H	L	L	L	L	H	H	L	L	Inversion of BRK OUT (pin 10 of IC501)
IC502-4	Input	H	L	L	L	L	H	H	L	L	Same as output of IC502-2
	Output	L	H	H	H	H	L	L	H	H	Inversion of output of IC502-2
IC502-6	Input	H	H	H	H	H	H	H	L	L	SCAN Solenoid driver
	Output	L	L	L	L	L	L	L	H	H	
X511	B	0	0	0	0	0	0	0	0.7	0.7	
	C	15	15	15	15	15	15	15	0	0	
X801	B	4.4 V for about 2 seconds after power supply starts and 5 V thereafter									Timer standby
	C	5 V for about 2 seconds after power supply starts and 0 V thereafter									
X802	B	0.6 V for about 2 seconds after power supply starts and 0 V thereafter									
	C	0 V for about 2 seconds after power supply starts and 5 V thereafter									
X506	B	0.7	–	–	–	–	0.7	0.7	Same as FF & REW		Auto stop
	C	0	≒0				0	0	≒0		
IC502-1	Input	0	≒0				0	0	≒0		Same as level of X506's collector
	Output	H	H	H	H	H	H	H	H	H	Turns to "L" briefly, 1 second after tape travel stops.
		Approx. 2.5 V when memory switch is OFF and approx. 4.5 V when memory switch is set to STOP or PLAY.									
X502	B	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	PLAY solenoid driver
	C	0	0	0	0	0	0	0	0	0	
X503	B	0	0	0	0	0	0	0	0	0	Gets inverted for about 0.2 second when mode changes: STOP to PLAY (REC) or PAUSE (REC/PAUSE) to PLAY (REC).
	C	30	25	25	25	25	30	30	25	25	
X504	B	0	1.4	1.4	1.4	1.4	0	0	1.4	1.4	Brake solenoid driver
	C	15	0.8	0.8	0.8	0.8	15	15	0.8	0.8	
	E	0	0.7	0.7	0.7	0.7	0	0	0.7	0.7	
X505	B	0	0.7	0.7	0.7	0.7	0	0	0.7	0.7	
	C	30	0	0	0	0	30	30	0	0	
X501	B	4.5	0.7	5.0	0	0	4.5	4.5	0.7	5.0	FF LED driver
	C	more than 30	0	more than 3	more than 3	more than 3	more than 3	more than 3	0	more than 3	
	E	5.0	0	5.0	0	0	5.0	5.0	0	5.0	

IC501 (M54886P) PIN ASSIGNMENT

Pin No.	Label		Description
1	PAUSE/$\overline{\text{STOP}}$	Operation inputs	Input terminal which selects PAUSE mode at "H" level and STOP mode at "L" level; also remains open when there is no input signal.
2	FF/$\overline{\text{PLAY}}$		Input terminal which selects FF mode at "H" level and PLAY mode at "L" level.
3	REW/$\overline{\text{REC}}$		Input terminal which selects REW mode at "H" level and REC mode at "L" level. Input $\overline{\text{REC}}$ is effective only when PAUSE or $\overline{\text{PLAY}}$ is input simultaneously.
4	TIMER START		Input terminal which selects on operating mode just after power supply starts. "H" level selects PLAY mode, "L" level REC mode, and open state STOP mode.
5	$\overline{\text{AUTO}}$	Control inputs	Input terminal which changes operating mode; PLAY to REW, REW to PLAY, and FF to STOP, as a negative pulse (⌐└┘) is detected.
6	$\overline{\text{ANTI}} \cdot \overline{\text{REC}}$		Input terminal which inhibits recording at "L" level.
7	T		Connects the external capacitor (resistor) of an oscillator.
8	GND		Ground
9	MUTE OUT	Outputs	Muting signal output
10	BRK OUT		Reel disk brake signal output
11	$\overline{\text{MOTOR(F)}}$ OUT		Reel motor forward drive signal output
12	$\overline{\text{MOTOR(R)}}$ OUT		Reel motor reverse drive signal output
13	$\overline{\text{PLAY}}$ OUT		PLAY signal output
14	$\overline{\text{PAUSE}}$ OUT		PAUSE signal output
15	$\overline{\text{REC}}$ OUT		Recording signal output
16	VCC		Power

OUTPUT LEVELS OF IC501(M54886P) IN EACH OPERATING MODE

Output / Pin / Mode	$\overline{\text{PAUSE}}$	MUTE *	$\overline{\text{REC}}$	$\overline{\text{PLAY}}$	BRK *	$\overline{\text{MOTOR(F)}}$	$\overline{\text{MOTOR(R)}}$
	14	9	15	13	10	12	11
STOP	H	H	H	H	L	H	H
FF	H	H	H	H	H	L	H
REW	H	H	H	H	H	H	L
PLAY	H	L	H	L	H	L	H
REC	H	L	L	L	H	L	H
REC/PAUSE	L	L	L	H	L	H	H
PAUSE	L	H	H	H	L	H	H

MUSIC SCAN – (Forward) ..... Same as FF mode
MUSIC SCAN – (Reverse) ..... Same as REW mode
Signals marked with * are active at "H" and other at "L".

Main Amp. P.W. Board Parts List

⚠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
	VMW1532-004	P.W. Board		1
R101, 201, 946	QRD141J-153SY	C. Resistor	15 kΩ ¼ W	3
R102,202,139,239,143,243,155, 255,158,258,901,197,297	" -332SY	"	3.3 kΩ "	13
R116, 216, 117, 217, 131, 231, 134, 234, 163, 263, 171, 271, 198, 298	" -472SY	"	4.7 kΩ "	14
R105, 205, 196, 296	" -224SY	C. Resistor (Low Noise)	220 kΩ "	4
R106, 206, 118, 218, 906	" -121SY	C. Resistor	120 Ω "	5
R107, 207, 151, 251, 172, 272	" -823SL	C. Resistor (Low Noise)	82 kΩ "	6
R108, 208, 175, 275	" -273SL	C. Resistor	27 kΩ "	4
R109, 209, 152, 252, 199, 299	" -334SY	"	330 kΩ "	6
R110, 210, 167, 267	" -101SY	"	100 Ω "	4
R111, 211, 118, 218, 137, 237, 902, 903, 904, 907, 926, 928, 929, 966, 192, 292	" -103SY	"	10 kΩ	16
R112,212,181,281,935,194,294	" -222SY	"	2.2 kΩ "	7
R115, 215, 162, 262	QRD147J-102S	"	1 kΩ "	4
R114, 214, 144, 244	" -681SY	"	680 Ω "	4
R119, 219, 176, 276	" -184SY	"	180 kΩ "	4
R130, 230	QRD143J-121S	"	120 Ω "	2
R132, 232	QRD141J-680SY	"	68 Ω "	2
R133, 233	" -122SY	"	1.2 kΩ "	2
R135	QRD147J-102S	"	1 kΩ "	1
R235, 165, 265	QRD143J-102S	"	1 kΩ "	3
R136	QRD147J-155S	"	1.5 MΩ "	1
R236	QRD143J-155S	"	1.5 MΩ "	1
R193, 293	" -104S	"	100 kΩ "	4
R141, 241	" -753SY	"	75 kΩ "	2
R142, 242	QRD142J-154S	"	150 kΩ "	2
R145, 245, 154, 254, 184, 284, 180, 280, 924, 933	QRD141J-223SY	"	22 kΩ "	10
R146, 246, 947, 968, 927	" -272SY	"	2.7 kΩ "	5
R147, 247	QRD142J-151S	"	150 Ω "	2
R153, 253, 973, 974	QRD141J-473SY	"	47 kΩ "	4
R187, 287	" -820SY	"	82 Ω "	2
R157, 257, 189, 289, 190, 290, 912, 138, 238, 183, 283	" -104SY	"	100 kΩ "	11
R164, 264	" -820SY	"	82 Ω "	2
R173, 273	QRD147J-105S	C. Resistor	1 MΩ "	2
R177, 277	" -563SY	"	56 kΩ "	2
R178, 278	" -124SY	"	120 kΩ "	2
R179, 279, 921, 922	QRD141J-683SY	"	68 kΩ "	4
R182, 282	QRD142J-125S	"	1.2 MΩ "	2
R185, 285	QRD141J-152SY	"	1.2 kΩ "	2
R186, 286	QRD147J-221S	"	220 Ω "	2
R905	⚠QRD149J-331S	Unflammable Resistor	330 Ω "	1
R911, 113, 213	QRD147J-123S	C. Resistor	12 kΩ "	3
R913, 925	QRD141J-392SY	"	3.9 kΩ "	2
R914	QRD147J-561S	"	560 Ω "	1
R915,104,204,166,266,195,295	" -822S	"	8.2 kΩ "	7
R916	QRD121K-122	"	1.2 kΩ "	1
(R917)	V44611-005	Formed Bus Wire		1
R923	QRD143J-221S	C. Resistor	220 Ω ¼ W	1
R934, 936	QRD141J-562SY	"	5.6 kΩ "	2
R931	⚠QRD149J-221S	Unflammable Resistor	220 Ω "	1
R156, 256	QRD141J-471S	C. Resistor	470 Ω "	2
R191, 291	QRD143J-394S	"	390 kΩ "	2

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
R948–952	QRD141J-560SY	C. Resistor	56 Ω ¼ W	5
R953	QRD126K-560	"	56 Ω ½ W	1
R959	⚠QRG019J-220	OMF Resistor	22 Ω 1 W	1
R960	⚠ " -121	"	120 Ω "	1
R965	QRD147J-221S	C. Resistor	120 Ω ¼ W	1
R967	QRD141J-222SY	"	2.2 kΩ "	1
R969	⚠QRD149J-121S	Unflammable Resistor	120 Ω "	1
R970	⚠QRD126K-181	"	180 Ω ½ W	1
R971	⚠ " -820S	"	82 Ω "	1
R972	⚠QRD149J-390S	"	39 Ω ¼ W (KD-A55C/J/U)	1
	⚠QRH144J-390	Fusible Resistor	39 Ω " (KD-A55A/B/E)	1
R975	QRD142J-100S	C. Resistor		1
R976	QRD141J-392SY	"		1
	V44611-001	Formed Bus Wire	5 mm	2
	V44611-003	"	15 mm	2
	V44611-005	"	12.5 mm	2
	QWY123-022	Bus Wire	for Jump	20
	V44611-002	Formed Bus Wire	10 mm	1
VR101, 201	QVP8A0B-024	V. Resistor	PB. EQ	2
VR102, 202	" -024	"	PB. Level	2
VR103, 203	" -023	"	Meter	2
VR104, 204	QVD8A2A-014V	"	Output	1
VR105, 205	QVE5A3A-024F	"	Input	2
VR106, 206	QVP8A0B-024	"	Rec. Level	2
VR107, 207	QVP4A0B-244	"	Bias – SF	2
VR108, 208	QVP4A0B-224	"	Bias – SA	2
VR109, 209	QVP4A0B-102	"	Bias – Metal	2
C101, 201, 172, 272	QCS11HJ-391	C. Capacitor	390 pF 50 V	4
C102, 202, 103, 203, 130, 230	QEB41EM-106M	E. Capacitor (Low Leak)	10 μF 25 V	6
C104, 204	QCS11HK-101	C. Capacitor	100 pF 50 V	2
C105, 205, 123, 223, 166, 266, 925	QFM41HJ-103	M. Capacitor	0.01 μF 50 V	7
C106, 206	QCS11HK-680	C. Capacitor	68 pF 50 V	2
C107, 207, 143, 243, 906, 916, 917, 927, 949	QET41HR-106N	E. Capacitor	10 μF 50 V	9
C108, 208	QEB41EM-475M	E. Capacitor (Low Leak)	4.7 μF 25 V	2
C109, 209, 144, 244, 155, 255, 173, 273, 907	QET41ER-336N	E. Capacitor	33 μF "	9
C110, 210	QFM41HJ-123	M. Capacitor	0.012 μF 50 V	2
C111, 211, 168, 268	" -332	"	0.0033 μF "	4
C112, 212	" -122	"	0.0012 μF "	2
C121, 221, 122, 222, 153, 253	QEB41HM-105M	E. Capacitor (Low Leak)	1 μF "	6
C124, 224, 135, 235, 141, 241, 145, 245, 161, 261, 170, 270, 941, 177, 277, 178, 278, 179, 279	QET41HR-105N	E. Capacitor	1 μF "	19
C125, 225	QCS11HJ-201	C. Capacitor	200 pF "	2
C126, 226, 162, 262	QFM41HJ-152	M. Capacitor	0.0015 μF "	4
C127, 227	QFM41HJ-222	"	0.0022 μF "	2
C128, 228	" -273	"	0.027 μF "	2
C129, 229	QEB41HM-335M	E. Capacitor (Low Leak)	3.3 μF "	2
C131, 231, 142, 242	QET41CR-476N	E. Capacitor	47 μF 16 V	4
C132, 232	QFM41HJ-562	M. Capacitor	0.0056 μF 50 V	2
C133, 233, 134, 234	QET41HR-335N	E. Capacitor	3.3 μF "	4
C151, 251	QEB41EM-335N	E. Capacitor (Low Leak)	3.3 μF 25 V	2
C152, 252	QCS11HK-471	C. Capacitor	470 pF 50 V	2
C154, 254	QET41AR-476N	E. Capacitor	47 μF 10 V	2
C163, 263	QFM41HJ-102	M. Capacitor	0.001 μF 50 V	2

Mecha Control P.W. Board Parts List

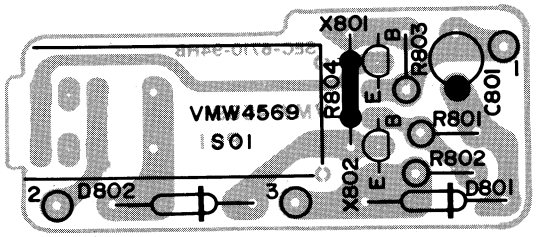
⚠ parts are safety assurance parts.
When replacing those parts, make sure to use the specified one.

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
	VMW2524-003	P.W. Board		1
R501–504, 511, 512, 528, 529, 545, 553, 559, 560, 572, 577, 587, 591, 593, 594	QRD141J-472SY	C. Resistor	4.7 kΩ ¼ W	18
R505–509, 521,	" -271SY	"	270 Ω "	6
R510	" -331SY	"	330 Ω "	1
R513	QRD121K-101	"	100 Ω ½ W	1
R514, 519	QRD141K-104SY	"	100 kΩ ¼ W	2
R515, 516, 518, 535, 558, 584, 585, 589, 592	" -102SY	"	1 k Ω "	9
R517, 576, 595, 596	" -222SY	"	2.2 kΩ "	4
R520	" -153SY	"	15 kΩ "	1
R522, 569	" -223S	"	22 kΩ "	2
R523, 526, 527, 533, 554, 556, 557, 583, 588, 586, 587, 598	" -103SY	"	10 kΩ "	12
R524	" -473SY	"	47 kΩ "	1
R525, 532	" -101SY	"	100 Ω "	2
R530	QRD142J-103S	"	10 kΩ "	1
R531, 578	QRD121K-681	"	680 Ω "	2
R534	QRD143J-103S	"	10 kΩ "	1
R538	⚠QRD126J-8R2	Unflammable Resistor	8.2 Ω ½W(KD-A55C/J/U)	1
	⚠QRH124J-8R2	Fusible Resistor	8.2 Ω " (KD-A55A/B/E)	1
R539	QRD126K-220	C. Resistor	22 Ω " (KD-A55C/J/U)	1
	QRH124J-220	Fusible Resistor	22 Ω " (KD-A55A/B/E)	1
R540, 541, 555	QRD121K-102	C. Resistor	1 kΩ ½ W	3
R542, 543	QRD141K-152SY	"	1.5 kΩ ¼ W	2
R544	⚠QRH014J-220	Fusible Resistor	22 Ω 1 W	1
R546	QRD141J-474SY	C. Resistor	470 kΩ ¼ W	1
R547, 548	" -273SY	"	27 kΩ "	2
R549	" -560SY	"	56 Ω "	1
R550	QRD142J-473S	"	47 kΩ "	1
R552	⚠QRG019J-331	OMF Resistor	330 Ω 1 W	1
R561, 563, 564, 570	QRD141J-473SY	C. Resistor	47 kΩ ¼ W	4
R562	QRD147J-223S	"	22 kΩ "	1
R565	QRD141J-680SY	"	68 Ω "	1
R566	QRD142J-224S	"	220 kΩ "	1
R567	QRD141J-123SY	"	12 kΩ "	1
R568	" -183SY	"	18 kΩ "	1
R571	" -182SY	"	1.8 kΩ "	1
R573	" -823SY	"	82 kΩ "	1
R574	QRD142J-104S	"	100 kΩ "	1
R575	" -222S	"	2.2 kΩ "	1
R579, 580	QRD141J-471SY	"	470 Ω "	2
R581	QRD142J-273S	"	27 kΩ "	1
R582	QRD141J-104SY	"	100 kΩ "	1
R590	" -101SY	"	100 Ω "	1
R599	" -182SY	"	1.8 kΩ "	1
R600	QRD143J-472S	"	4.7 kΩ "	1
C501–503, 514	QCF11HP-103	C. Capacitor	0.01 μF 50 V	4
C504, 512, 531	" -104	"	0.1 μF "	3
C505, 530	QEB41HM-474M	E. Capacitor (Low Leak)	0.47 μF "	2
C508	QET40JR-476N	E. Capacitor	47 μF 6.3 V	1
C509, 510, 515	QET41HR-106N	"	10 μF 50 V	3
C511	QET40JR-477N	"	470 μF 6.3 V	1
C513, 533, 527	QET41HR-475N	"	4.7 μF 50 V	3
C516	QET41AR-476N	"	47 μF 10 V	1
C517	QET41VR-108N	"	1000 μF 35 V	1
C519	QET41ER-476N	"	47 μF 25 V	1

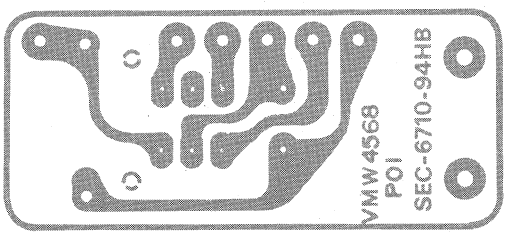
Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
C521, 523, 526	QET41HR-105N	E. Capacitor	1 μF 50 V	3
C524	QCS11HK-151	C. Capacitor	150 pF "	1
C528	QEB41HM-105M	E. Capacitor (Low Leak)	1 μF "	1
C529	QET41CR-477N	" "	470 μF 16 V	1
C532	QFM41HK-473	C. Capacitor	0.047 μF 50 V	1
C536	QET40JR-227N	E. Capacitor	220 μF 6.3 V	1
VR501	QVP6A0B-013	V. Resistor	1 kΩ	1
(D524)	V44611-003	Formed Bus Wire		1
D526, 525, 523, 522, 501–511, 513–519, 521	MA150	Si. Diode		22
D510	⚠10E1-B	"		1
D512	RD6.2E(B3)	Zener Diode		1
D520	OA90	Ge. Diode		1
X501, 502, 504, 506, 512–518, 519, 520	2SC945L(PA,KA)	Si. Transistor		13
X503, 505	2SD571(LA, KA)	"		2
X507, 508	2SD471(LA, KA)	"		2
X509–511	2SC2001(L, K)	"		3
IC501	M54886P	IC		1
IC502	M53206P	"		1
IC503	AN6552	"		1
IC504	M74LS03	"		1
CN501	QMV5004-008	Plug Ass'y		1
CN502	" -006	"		1
CN503	QMV5005-008	"		1
CN504	QMV5004-003	"		1
	V44611-005	Formed Bus Wire	12.5 mm	3
	QWY123-022	Bus Wire		24
	E43727-002	Wrapping Wire		33

Other P.W. Board Parts

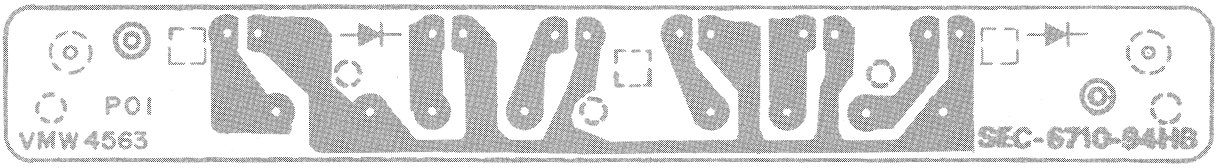
– Timer Standby Switch –



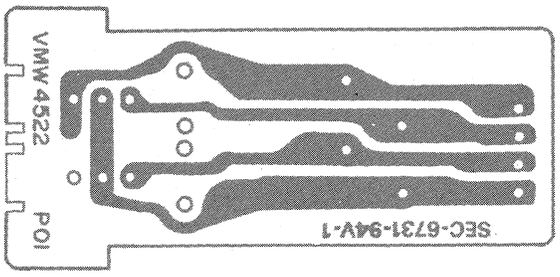
– Memory Switch –



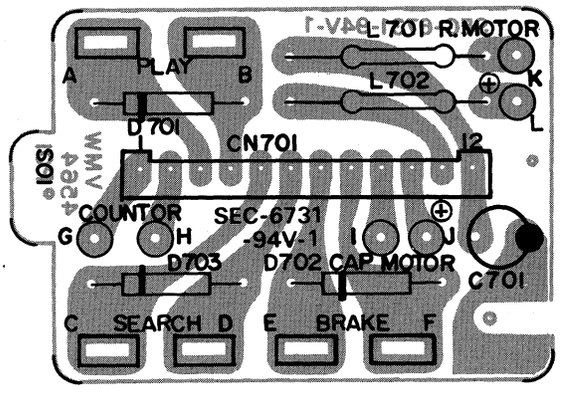
– LED –



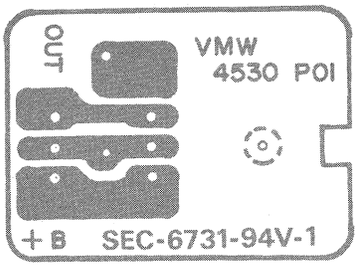
– Slide Switch –



– Connector –

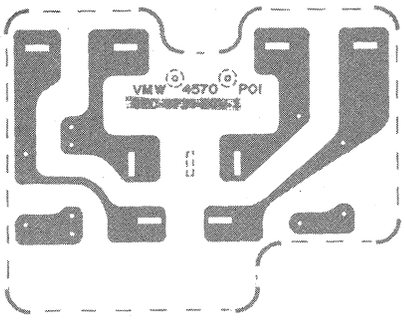


– Hall IC –

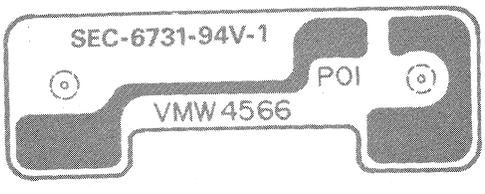


– Power Switch –

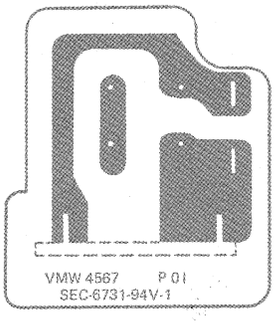
KD-A55A/B/C/E/J



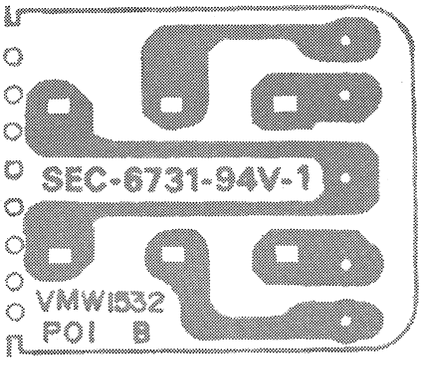
– Back Light –



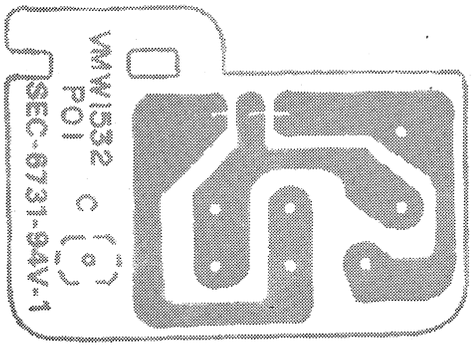
KD-A55U



– Volume –



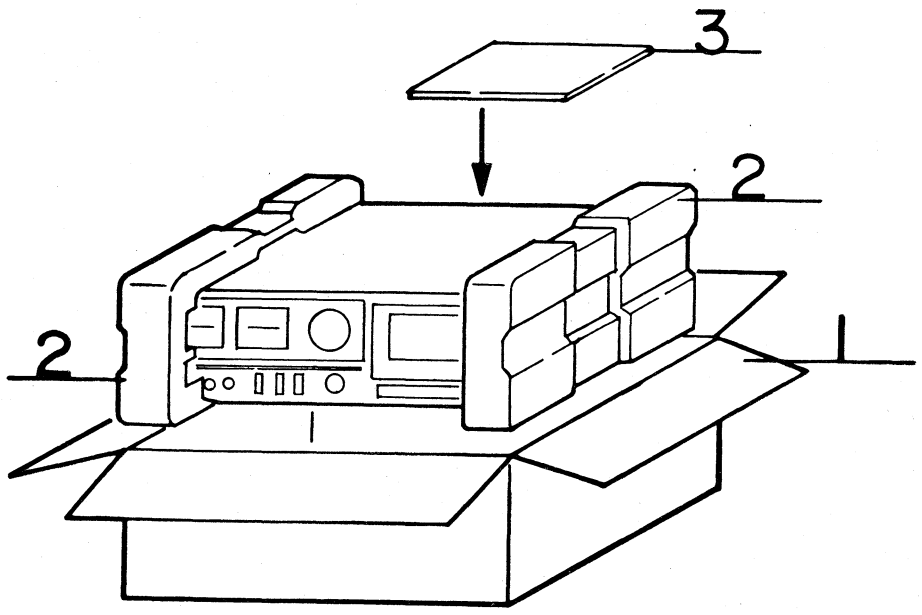
– IC –



Other P.W. Board Parts List

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
(LED)				
	VMW4563-001	P.W. Board		1
D301–305	SLP-155B-01V	LED		5
D306	SLP-255B-01V	"		1
	VJD3214-001	LED Holder		1
(Timer Standby Switch)				
	VMW4569-001	P.W. Board		1
R801	QRD143J-683S	C. Resistor	68 kΩ ¼ W	1
R802, 803	" -473S	"	47 kΩ "	2
R804	QRD141J-683S	"	68 kΩ "	1
C801	QET41CR-226N	E. Capacitor	22 μF 16 V	1
D801, 802	MA150	Si. Diode		2
X801	2SA733A(P,K)	Si. Transistor		1
X802	2SC945L(PA,KA)	"		1
	QSS2301-102	Slide Switch	for Timer Standby	1
	LPSP2604Z	Screw		2
(Touch Switch)				
	VST0004-001	SW. Unit Ass'y		1
D604	SLP-114BV	LED		1
D601–603, 605, 606	SLP-214BV	"		5
(Power Switch)				
	VMW4570-001	P.W. Board	KD-A55A/B/C/E/J	1
	VMW4567-001	P.W. Board	KD-A55U	1
	QSP2111-011	Push Switch	for Power Switch KD-A55A/E	1
	" -011BS	"	" KD-A55B	1
	QSP1110-222	"	" KD-A55C/J	1
	" -221	"	" KD-A55U	1
C01, 02	QPZ9010-103	M.P. Capacitor	0.01 μF	2
R01, 02	QRD149J-820S	Unflammable Resistor		2
	E40130-001	Tab		4
	LPSP3006ZS	Screw	for Power Switch	2
(Memory Switch)				
	VMW4568-001	P.W. Board		1
	QSS2301-102	Slide Switch		1
(Back Light)				
	VMW4566-001	P.W. Board		1
	QLP3601-003	Lamp		1
(Slide Switch)				
	VMW4522-001	P.W. Board		1
	QSP0029-001	Slide Switch		1
	QMV5004-004	Connector		1
(Hall IC)				
	VMW4530-002	P.W. Board		1
	DN6835	Hall IC		1
	QMV5005-003	Connector		1
(Connector)				
	VMW4564-001	P.W. Board		1
	10E1	Si. Diode		3
	QMV5005-012	Connector		1
	E40130-012	Tab		6
	T41572-001	Inductor		2
	QEW41HA-105N	E. Capacitor	1 μF 50 V	1
(IC)				
	VMW1532-004	P.W. Board		–
	UPC78M15H	IC		1
	VKL4771-001	Heat Sink		1
	LPSP3006ZS	Screw	for IC903	1
	SBSB3006Z	"	for Heat Sink	2

Packing



Packing Material List

Ref. No.	Parts No.	Parts Name	Remarks	Q'ty
1 ~ 2	VPA3131-00B	Packing Case Ass'y	KD-A55A/B/E/U	1 set
1 ~ 2	" -00C	"	KD-A55C	"
1 ~ 2	" -00D	"	KD-A55J	"
1	VPA3131-004	Case	KD-A55A/B/E/J/U	1
1	" -005	"	KD-A55C	1
2	VPH2126-001	Cushion (L)		1
2	VPH2127-001	" (R)		1
	QPGA060-06005	Envelope	for Set	1
	AP4056A-036	"	for Power Cord, Provided Cord	2
	" -077	"	for Instruction Book	1
	TKS000501-08	Sheet	for Set	1
	VPK4132-001	Spacer		1

Accessories

Parts No.	Parts Name	Remarks	Q'ty
VMP0002-00A	PIN Cord	KD-A55A/C/J/U	2
CN-201	DIN Cord	KD-A55B/E	1
VYA4001-00A	Head Cleaning Stick		1
VNN0055-301	Instruction Book		1
VND4013-001	Warning Label	for Disconnection KD-A55A/B/E	1
T46328-003	Caution Label	for Voltage Selector KD-A55A/B	1
BT20029B	Warranty Card	KD-A55A	1
BT20013C	Guarantee Certificate	KD-A55B	1
TJL000443-01	Seal	Made in Japan KD-A55B	1
	BEAB Label	KD-A55B	1
QZL1002-003BS	Warning Label	for 2-pin Power Cord KD-A55B	1
VNC5004-001	Mark Sticker	DIN45500 for V. Selector KD-A55B/E	1
BT20025C	Warranty Card	KD-A55C	1
T44362-001	CSA Marker	KD-A55C	1
TLT000505-01	UL/CSA Caution Label	KD-A55C/J	1
T46328-004	Caution Label	for Voltage Selector KD-A55E	1
BT20032B	Warranty Card	KD-A55J/U (U – for PX. EES)	1
BT20042	Special Reply Card	KD-A55J/U (U – for PX. EES)	1
E7795-1	EP Mark	KD-A55U (for PX. EES)	1
V04062-001	Siemens Plug	KD-A55U	1
T46328-001	Caution Label	KD-A55U	1
VNC5311-101	Caution Card	KD-A55U (for EES)	1
VPZ4001-001	Serial Ticket	KD-A55A/B/E/J/U	1
T43758-001	Serial Ticket	KD-A55C	1